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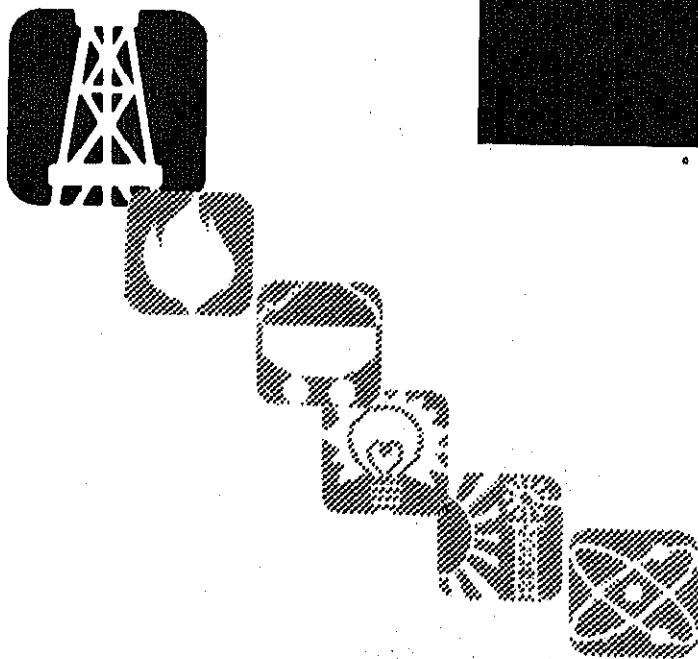
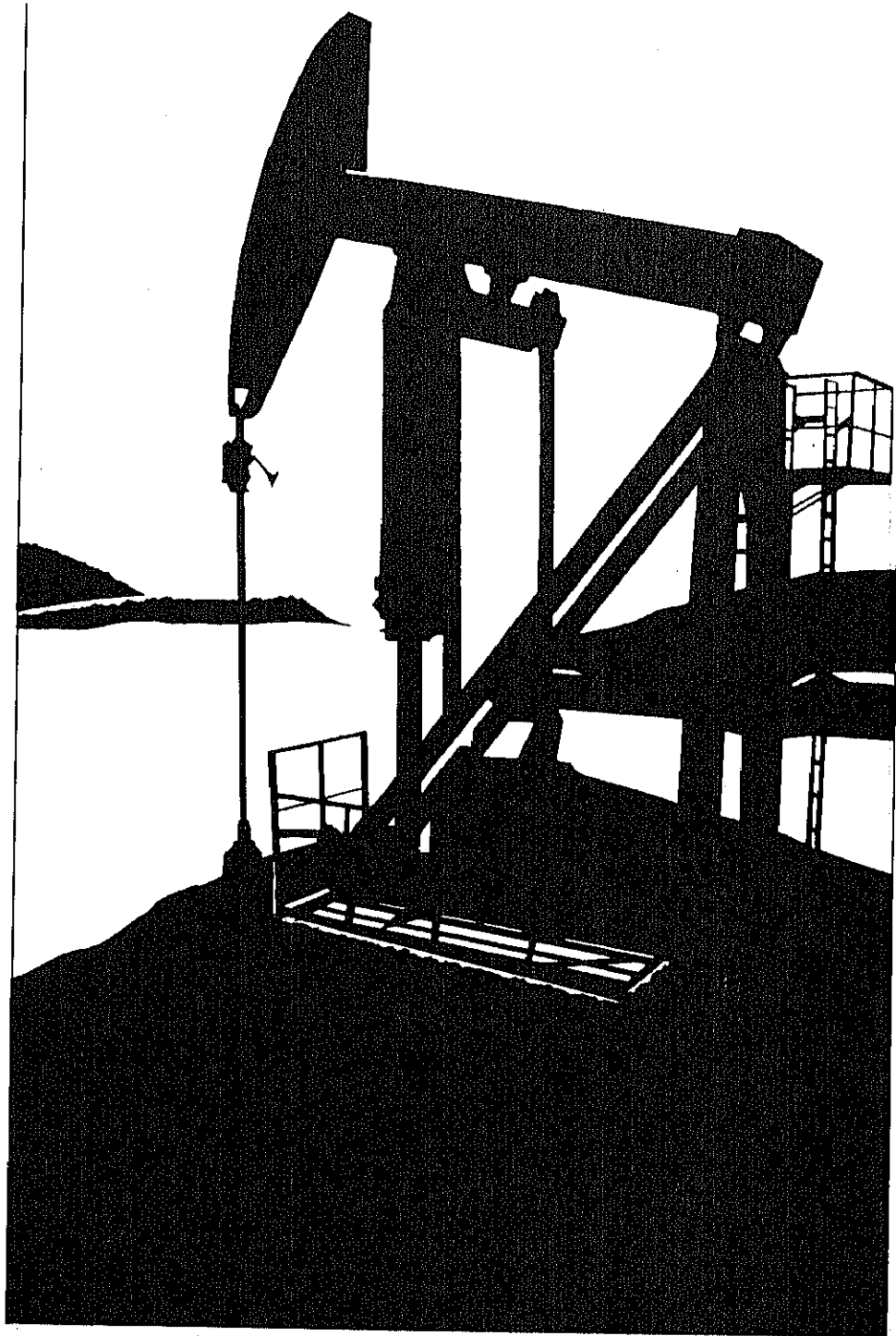
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# **Explore the Future of Petroleum Supply Information**

...with the Energy  
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Administration



**Wednesday, August 24, 198  
8 A.M. - 3:30 P.M.  
KEY BRIDGE MARRIOTT HOTEL  
Arlington, Virginia**

# Energy Information Administration Symposium on Petroleum Supply Information

Wednesday, August 24, 1983  
8 a.m. - 3:30 p.m.  
KEY BRIDGE MARRIOTT HOTEL  
Arlington, Virginia

## Keynote Address

### "Energy Issues Facing the U.S.: A Policy Perspective"

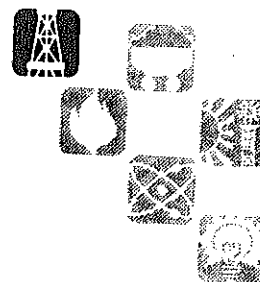
Danny J. Boggs, Special Assistant  
to the President for Energy,  
Natural Resources, Environment  
and Agriculture

## Opening Remarks

J. Erich Evered,  
Administrator  
Energy Information  
Administration

### "Petroleum Supply Division Activities: Present and Future"

Frank E. Lalley, Director  
Petroleum Supply Division  
Energy Information  
Administration



## Morning Sessions

### - Session 1

10:20-11:50 a.m.

#### World Economic Changes and U.S. Oil Supply

Chairman: Jimmie L. Petersen, Director,  
Office of Oil and Gas, EIA

Room A

- "Trends in Refinery Capacity and Utilization (Results of 1983 EIA Refinery Survey)."  
Elizabeth Campbell, Economist,  
Petroleum Supply Division, EIA

"World Oil Price and Inventory Cycles."  
Dr. John L. Moore, Deputy Area Manager,  
Applied Management Sciences

"Minimum Operating Inventories for Gasoline,  
Distillate Fuel Oil and Residual Fuel Oil."  
Richard D. Farmer, Economist,  
Petroleum Supply Division, EIA

### Session 2

10:20-11:50 a.m.

#### Availability of EIA Petroleum Supply Information: Surveys, Systems and Publications

Room B

Chairman: Dr. Barry M. Yaffe, Chief,  
Data Analysis and Support Branch, EIA

- "EIA Petroleum Supply Surveys: An Overview."  
Ronald W. O'Neill, Publications Branch,  
Petroleum Supply Division, EIA
- "Systems Improvements: The Integrated Petroleum  
Supply Data Base."  
Robert Lesko, Vice President,  
Technology and Information Systems,  
Applied Management Sciences
- "New Data and Information Services."  
John Daniels, Director,  
National Energy Information Center, EIA

## Afternoon Sessions

### Session 3

1:30-3:30 p.m.

#### **Current Petroleum Supply Situation and Outlook**

Room A

Chairman: Dr. Wray Smith, Director,  
Office of Energy Markets and End Use, EIA

- "The Current Petroleum Situation: Expectations for Fall and Winter 1983/84."  
Albert H. Linden, Jr.,  
Deputy Administrator, EIA
- "Outlook for World Crude Oil Prices."  
Calvin W. Kilgore, Acting Director,  
Short-Term Information, EIA
- "The Outlook for Transportation Fuels."  
Dr. David Green, Group Leader,  
Transportation Energy Group,  
Oak Ridge National Laboratory
- "Intermediate Term Petroleum Projections."  
Dr. John Pearson, Director,  
Longer-Term Information, EIA

### Session 4

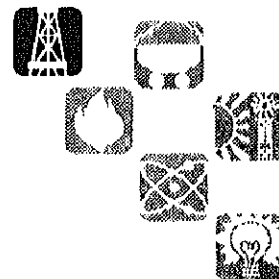
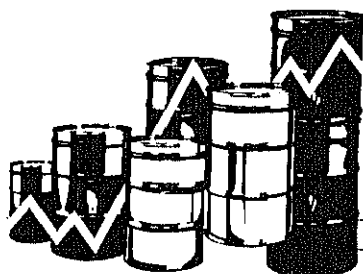
1:30-3:30 p.m.

#### **Petroleum Supply Data: Scope and Quality**

Room B

Chairman: Dr. Yvonne M. Bishop, Director,  
Office of Statistical Standards, EIA

- "Accuracy of Petroleum Supply Data."  
Dr. Nancy Kirkendall, Statistician,  
Petroleum Supply Division, EIA
- "Advances in Quality Control in PSD Data."  
Dr. Lawrence A. Thibodeau,  
Deputy Area Manager,  
Applied Management Sciences
- "Liquefied Petroleum Gas Reporting."  
Gary Oleson, Statistician,  
Petroleum Supply Division, EIA
- "Statistical Design of the Weekly Petroleum Status Report."  
Dr. Eugene Burns and Yahia Ahmed, Statisticians,  
Petroleum Supply Division, EIA



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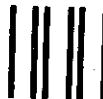
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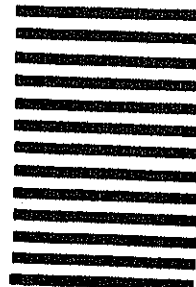
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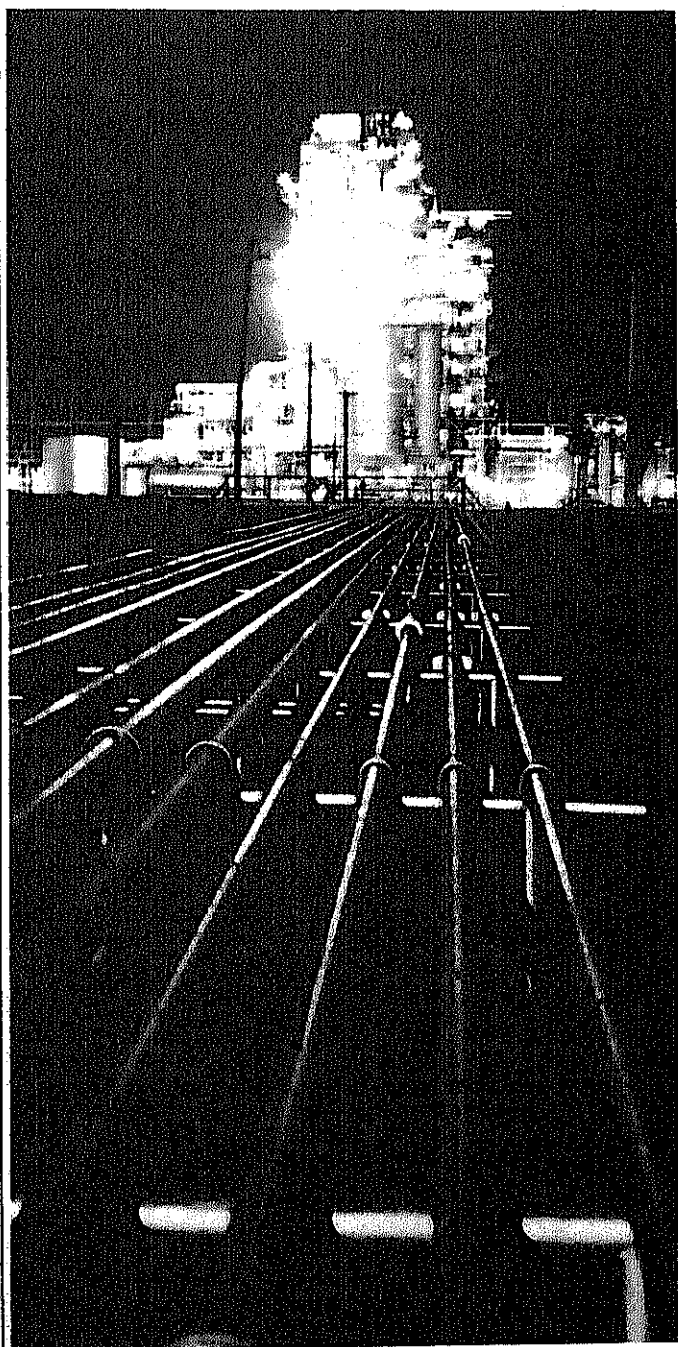




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This issue of the Petroleum Supply Monthly features a mid-year review of petroleum supply developments. The article, Mid-Year Petroleum Review, begins on Page ix and focuses on consumption, domestic crude oil production, refinery operations, foreign trade, stocks, and prices. The article also discusses exploration and development activity.



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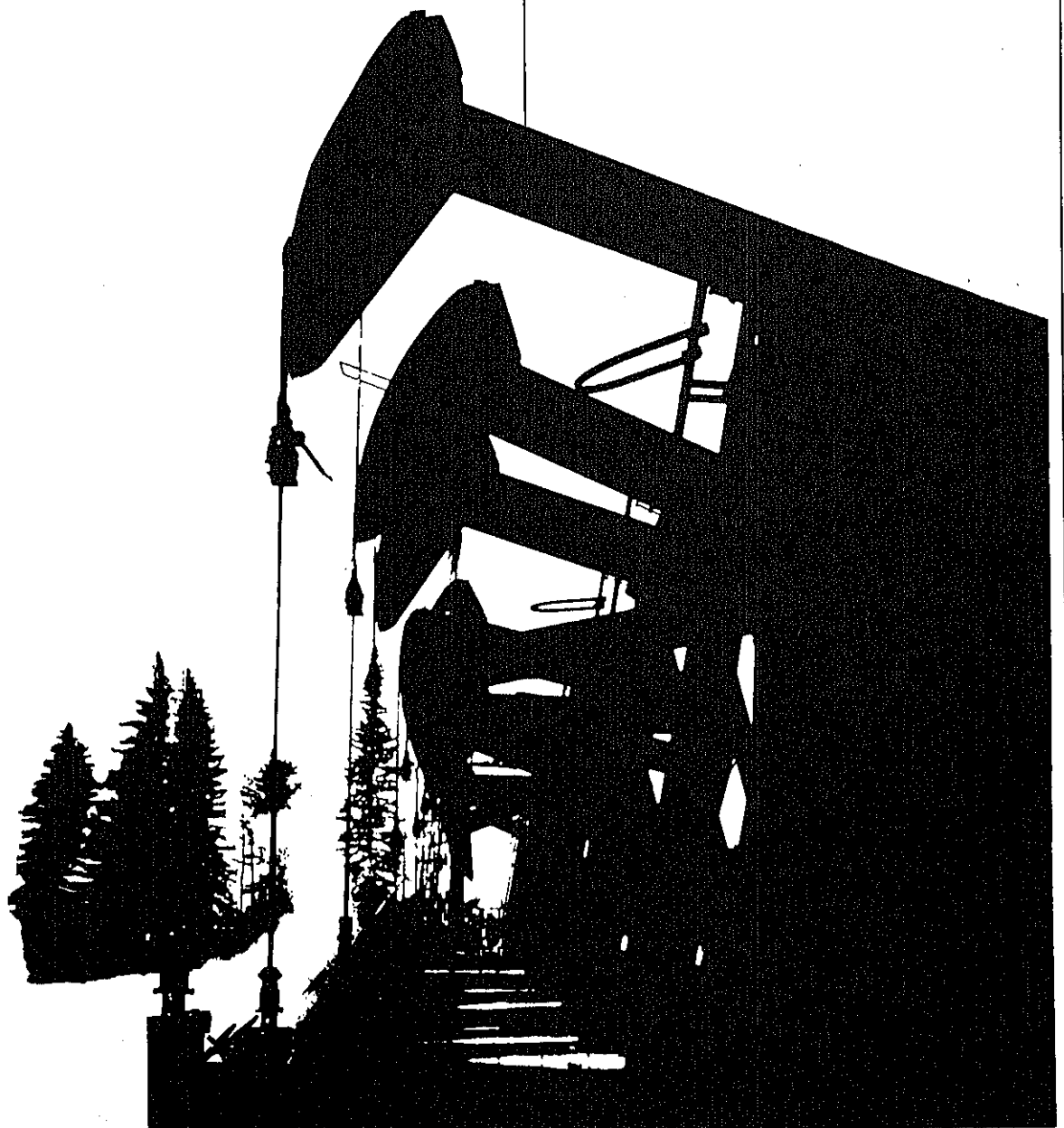
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# **Petroleum Focus**



# ERRATA

Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, January–April 1983

API Gravity, Weighted Average											
	PAD District I			PAD District II			PAD District III			PAD Dist. IV	United States
	East Coast	Appalachian No. 1	Total	Ind., Ill., Ky.	Minn., Wisc., Daks.	Total	Texas Gulf Coast	No. La., Ark.	Total	Rocky Mt.	
January	32.39	40.80	32.96	35.65	30.34	35.43	35.24	34.14	34.84	35.48	33.07
February	31.18	40.96	31.88	36.28	30.64	35.76	34.51	32.26	35.02	35.38	33.13
March	30.51	41.15	31.27	36.32	27.69	35.74	34.99	NC	34.88	35.89	33.18
April	29.86	NC	30.74	35.67	30.24	35.65	34.69	NC	34.67	35.36	33.02

NC—No Change.

Note: This table displays revisions to API Gravity for the months January through April 1983. These changes are the result of revisions to company reports.

# Petroleum Supply Summary

Average Volume for Period (Million Barrels Per Day)	June			Cumulative January Through June		
	1983	1982	% Change	1983	1982	% Change
Total Product Supplied	15.2	15.0	1.4	14.9	15.6	- 4.6
Motor Gasoline	6.9	6.8	1.3	6.5	6.5	- 0.5
Distillate Fuel Oil	2.5	2.5	3.1	2.7	2.9	- 7.6
Residual Fuel Oil	1.3	1.5	- 15.6	1.4	1.9	- 24.0
Crude Inputs to Refineries	12.3	12.5	- 1.4	11.4	11.6	- 2.4
Crude Oil and Natural Gas Liquids Production	10.2	10.2	0.02	10.2	10.2	0.3
Net Imports <sup>1</sup>	4.3	4.6	- 8.0	3.6	4.1	- 12.4
Net Crude Oil Imports <sup>2</sup>	3.0	3.6	- 18.1	2.5	2.9	- 13.7
SPR Imports	0.2	0.1	78.1	0.2	0.2	28.4
Net Product Imports	1.1	0.9	23.2	0.9	1.0	- 15.2
Crude Oil Stock Withdrawal <sup>2</sup>	0.11	0.14	—	- 0.01	0.11	—
Product Stock Withdrawal	- 0.32	- 0.49	—	0.51	0.76	—
Stocks at End of Period (Million Barrels)						
Crude Oil <sup>2</sup>	356	344	NM			
Motor Gasoline <sup>3</sup>	222	219	NM			
Distillate Fuel Oil	112	124	NM			
Residual Fuel Oil	49	61	NM			
Total Product	712	752	NM			
SPR	332	264	NM			
Total	1,400	1,360	NM			

<sup>1</sup>Gross imports of crude oil including Strategic Petroleum Reserve (SPR) and petroleum products less exports of crude oil and petroleum products.

<sup>2</sup>Excluding SPR.

<sup>3</sup>Including blending components.

NM = Not meaningful due to new stock basis.

Note: Percent changes are based on unrounded values. June 1983 data are estimates based on weekly data, except for export and Natural Gas Liquids Production estimates which are May 1983 monthly values. Totals may not be equal to sum of components due to independent rounding.

Source: Energy Information Administration, *Petroleum Supply Monthly*, July 1983.



# Mid-Year Petroleum Review

Petroleum consumption in the United States continued its downward trend during the first half of 1983, primarily as a result of decreased use of distillate and residual fuel oils. This continued decline in U.S. petroleum consumption was accompanied by stable domestic crude oil production, reduced domestic refinery operations, and generally lower product stock levels. A significant decline in petroleum imports and increased product exports also accompanied the decline in domestic consumption. The marker price of Arabian Light Crude dropped \$5 to \$29 per barrel, early this year. Most petroleum products prices declined, but not as much as crude oil prices. Rotary rig activity, the number of wells completed, and seismic geophysical activity were down substantially from comparable 1982 levels. By mid-year, however, there were indications that the downward trends in exploratory and developmental activities were abating.

## Consumption

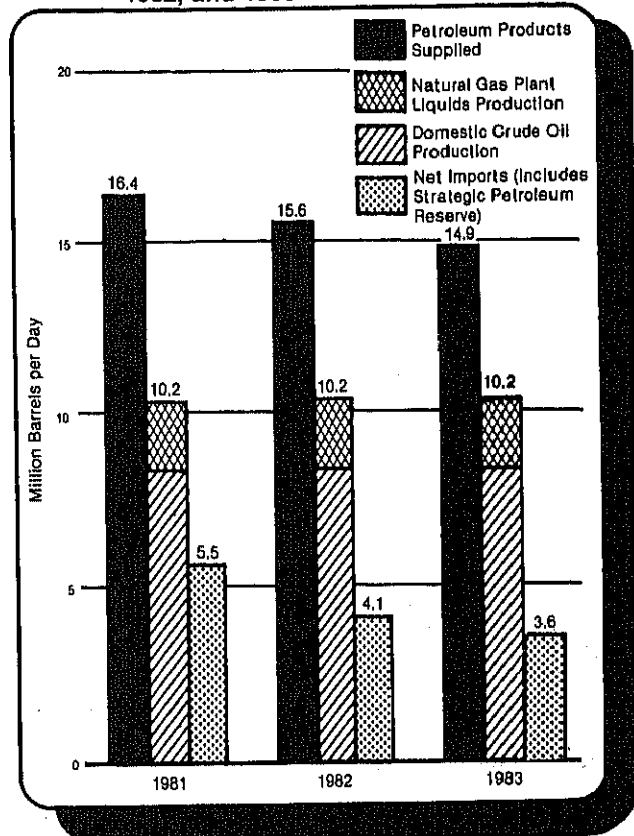
U.S. petroleum consumption (measured as "petroleum products supplied") averaged 14.9 million barrels per day (MMB/D), during the first half of 1983, or about 5 percent less than the comparable 1982 level. This continued a decline that began when petroleum consumption turned downward in 1979, after climbing through the 1970's to a record high of 18.8 MMB/D in 1978. The current drop in consumption is principally attributed to lower demand for distillate and residual fuel oil. Average distillate fuel oil consumption was about 2.7 MMB/D during the first half of 1983, approximately 8 percent less than during the first half of 1982. The decline was associated with unusually mild weather from January to April of this year, especially in Petroleum Administration for Defense District I (East Coast), the principal consuming area of distillate fuel oil for residential heating. Residual fuel oil consumption averaged 1.4 MMB/D, a corresponding decrease of about 24 percent. The lower consumption level resulted principally from the reduction in usage by utilities to generate electricity. Motor gasoline consumption was about the same as consumption during the first half of 1982.

## Supply

Estimates of petroleum supply for the first half of this year, compared with petroleum supply during the first half of 1982, show the following:

- **CRUDE OIL PRODUCTION**—There was virtually no change in domestic crude oil production. A nearly constant level of 8.6 MMB/D has been maintained for the past few years (see Figure 1). However, because of the decline in crude oil prices, some producing wells that were marginally profitable at higher prices became unprofitable,

Figure 1. Petroleum Supply, January-June 1981, 1982, and 1983



Source: Energy Information Administration, *Petroleum Supply Annual*, 1981, 1982; and *Petroleum Supply Monthly*, 1983.

Note: 1983 data are preliminary.

and drilling activity declined. Production is expected to decline slightly during the second half of 1983.

- **CRUDE OIL INPUTS TO REFINERIES**—As demand for petroleum products slackened, crude oil inputs to refineries also declined. Crude oil inputs ranged from 10.6 MMB/D in February to 12.3 MMB/D in June and averaged 11.4 MMB/D for the first half of the year. This is significantly less than the 11.6 MMB/D average for the comparable period in 1982 (see Table 1).

NOTE: Unless otherwise referenced, data in this article were taken from the Summary Statistics section of this report, *Petroleum Supply Monthly*, DOE/EIA-0109(83/07); *Petroleum Supply Annual 1982*, DOE/EIA-0340(82)/1 and 2; *Weekly Petroleum Status Report*, July 14, 1983, DOE/EIA-0208(83/28); and *Short Term Energy Outlook*, May 1983, DOE/EIA-0202(83/2Q). Where final data were not available, estimates were based on preliminary data.

**Table 1. Refinery Operations  
(Million Barrels per Day)**

	Jan.-Jun. 1981	Jan.-Jun. 1982	Jan.-Jun. 1983 <sup>a</sup>
<b>Refinery Input</b>			
Crude Oil	12.6	11.6	11.4
Natural Gas Liquids	0.5	0.5	0.4
Other Liquids	0.4	0.5	0.4
<b>Total Input</b>	<b>13.5</b>	<b>12.7</b>	<b>12.2</b>
<b>Refinery Output</b>			
Finished Motor Gasoline	6.3	6.2	6.2
Distillate Fuel Oil	2.6	2.5	2.3
Residual Fuel Oil	1.4	1.2	0.9
Other Products	3.7	3.3	3.3
<b>Total Output</b>	<b>14.0</b>	<b>13.2</b>	<b>12.6</b>

<sup>a</sup>Estimated.

Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, *Petroleum Supply Annual*, 1981, 1982; *Petroleum Supply Monthly*, 1983.

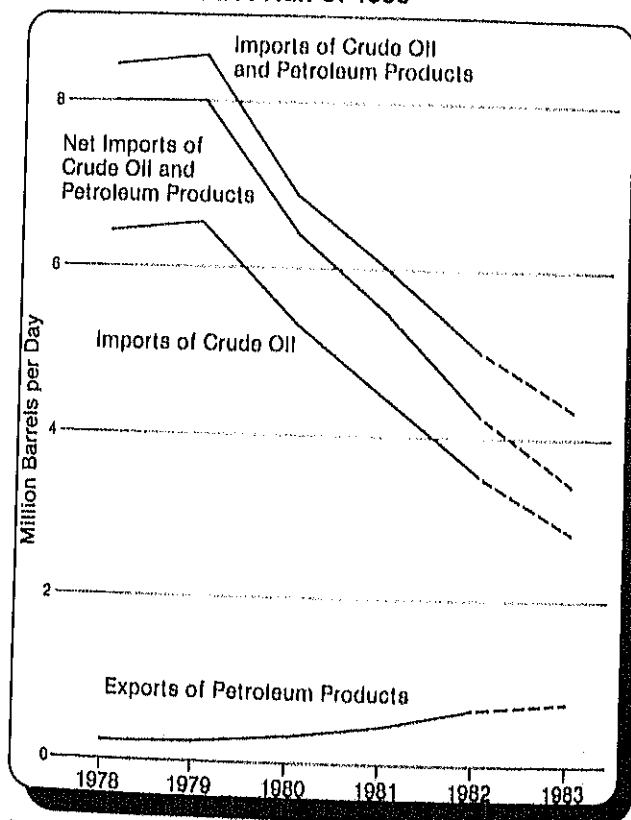
- **REFINERY CAPACITY UTILIZATION**—Refinery utilization during the first half of 1983 averaged 69 percent, about the same as during the first half of 1982. However, total input and output were less than during the comparable 1982 period, because refinery capacity was greater during the first half of last year. There was a net reduction in crude oil distillation capacity of 1.0 MMB/D during 1982.
- **TOTAL NET IMPORTS**—U.S. net imports of crude oil and petroleum products [gross imports, including imports for the Strategic Petroleum Reserve (SPR), minus exports] averaged 3.6 MMB/D, 12 percent lower than during the comparable period last year. Because domestic production of crude oil and natural gas liquids remained about the same, virtually all of the decline in consumption was accommodated by lower imports.
- **CRUDE OIL IMPORTS**—Gross imports of crude oil (excluding SPR imports) averaged 2.7 MMB/D, 14 percent less than during the first half of 1982. However, crude oil accounted for a slightly larger share of net imports during the first half of this year than during the same period in 1982. Crude oil imports for the SPR averaged 0.2 MMB/D, approximately 8 percent of all U.S. crude oil imports, compared with 5 percent during the first half of 1982.
- **PETROLEUM PRODUCTS IMPORTS**—Net imports of petroleum products decreased by 15 percent, largely as a result of a significant increase in exports of petroleum products. Exports of petroleum products began to increase markedly when restrictions on exports were relaxed by the U.S. Department of Commerce in October 1981 (see Figure 2). Preliminary estimates indicate the largest decline in net imports among petroleum

products was in residual fuel oil, which at 0.6 MMB/D was 23 percent below the comparable 1982 rate. In terms of volume, imports of petroleum products decreased less than imports of crude oil. Gross imports of petroleum products averaged 1.5 MMB/D, down 4 percent from the comparable 1982 average.

- **IMPORTS FROM THE ORGANIZATION OF PETROLEUM EXPORTING COUNTRIES (OPEC)**—OPEC' members provided 31 percent of U.S. imports of crude oil and petroleum products during the first 5 months of 1983, down from 46 percent during the comparable 1982 period and substantially below the 1977 record of 70 percent. This shift away from OPEC members as sources of U.S. petroleum imports was most pronounced with regard to imports from Saudi Arabia and Nigeria. Combined imports from these two countries averaged 369 MB/D, a sharp drop from the 1982 annual rate of 1,066 MB/D.

<sup>1</sup>See Glossary for a listing of OPEC members.

**Figure 2. Petroleum Trade, 1978 through 1982, and First Half of 1983**



Source: Energy Information Administration, *Petroleum Supply Monthly*.

Note: 1983 data are preliminary.

- **TOTAL PETROLEUM STOCKS**—Total petroleum stocks (excluding SPR) totaled 1,068 million barrels on June 30, 1983. Crude oil stocks accounted for 33 percent of total U.S. petroleum stocks on June 30 of this year, compared to 31 percent on June 30, 1982. Even though stocks of refined products at mid-year were proportionally lower than at that time last year, shortages are not expected to occur because of spare refining capacity and the ready availability of crude oil.
- **CRUDE OIL STOCKS**—The U.S. primary crude oil stock level (excluding the SPR) rose by 6 million barrels during the first 6 months of 1983. In contrast, the crude oil stock level dropped by 19 million barrels during the first half of 1982. On June 30, 1983, U.S. crude oil stocks totaled 356 million barrels.
- **PETROLEUM PRODUCTS STOCKS**—Petroleum products stocks at mid-year 1983 totaled 712 million barrels, significantly lower than mid-year 1982 levels. Despite these lower stock levels, no shortages of petroleum products have been noted.
- **STRATEGIC PETROLEUM RESERVE (SPR)**—Standing at 332 million barrels at mid-year, SPR crude oil stocks represented almost half of the U.S. total crude oil stocks. As a supplement to domestic crude oil production (assuming all crude oil imports were interrupted), crude oil from the SPR could fill the gap between domestic production and refinery inputs (at January through June 1983 rates) for about 125 days. SPR stock additions averaged over 200 MB/D during the first half of 1983.

### Fuels Update

During the first half of 1983, motor gasoline demand was about 6.5 MMB/D, the approximate level for the same period in 1982. Motor gasoline stocks at mid-year were 222 million barrels. Motor gasoline demand for the third quarter of 1983 is projected to be about 6.5 MB/D, slightly below the comparable 1982 level. Taking into account the stock levels of motor gasoline and crude oil combined with spare refining capacity, supplies are considered adequate for the 1983 summer driving season. The slight decrease in demand for 1983 is principally attributable to increasing fuel efficiency in the stock of automobiles. Price hikes that began in April with the 5-cents-per-gallon Federal tax increase, imposition of additional taxes by some States, and the pass-through of higher wholesale prices to the consumer also exerted downward pressure on gasoline demand.

Demand for distillate fuel oil during the first half of this year of 2.7 MMB/D was about 8 percent below the demand level during the comparable 1982 period. This reflects, in particular, the lower demand for heating oil associated with the warmer than normal winter. Stocks of

distillate fuel oil at the end of June totaled 112 million barrels. Refiners are expected to start rebuilding distillate stocks during the next few months in advance of heating season demand.

Residual fuel oil demand this year continued to fall. During the first 6 months of 1983, demand averaged 1.4 MMB/D, down about 460 MB/D from the comparable 1982 level. The continuing decline is due to several factors, including lower consumption by electric utilities, reduced industrial activity, and the warmer than normal winter. Stocks of residual fuel oil at the end of June were 49 million barrels. Despite the low stock level, no supply problems were reported. Stock rebuilding for the peak demand season is expected during the next few months.

### Price Trends

Following dramatic increases in 1979 and 1980, prices for crude oil and most petroleum products stabilized and began to decline in 1981. This trend continued throughout 1982 and the first half of 1983. A mild winter, the economic slump, and consumer conservation practices combined to weaken demand. Excess worldwide crude oil production, combined with reduced demand, contributed to a decline in crude oil prices. By February 1983, virtually all of the oil producing nations, including OPEC members, had substantially lowered their official crude oil prices. In March, OPEC members established new production ceilings and world crude oil prices began to stabilize around the benchmark price of \$29.00 per barrel for Arabian Light Crude.

The refiner acquisition cost of crude oil averaged \$28.33 in April 1983, the latest month for which data are available, down \$2.50 per barrel from the April 1982 level (see Table 2). Major petroleum product prices were also lower in April 1983 than a year earlier. Motor gasoline prices averaged 119.8 cents per gallon, 1.2 cents below the April 1982 price, despite an increase in the Federal tax on motor gasoline of 5 cents per gallon that became effective on April 1, 1983. Twenty-two states had also increased fuel taxes this year, as of July 1. The retail price of residential heating oil stood at 103.5 cents per gallon in April 1983, well below the April 1982 level. The current outlook, barring significant supply disruptions, is for petroleum product prices to remain stable and follow seasonal trends during the second half of 1983.

### Exploration and Development Activity Update

The decline in drilling activity that began in January 1982 brought the average rotary rig count to a low of 1,846 in April 1983 from the record high of 4,520 in December 1981. During May 1983 rig activity halted its decline and began increasing at rates commensurate with the normal seasonal trend. In June, the average number of rotary rigs operating was 1,979, of which 202 were offshore. Increased drilling activity is expected during the remainder of 1983. Offshore drilling is expected to



**Table 2. U.S. Average Petroleum Prices**

	April 1981	April 1982	April 1983
Dollars per Barrel			
Refiner Acquisition Cost of Crude Oil			
Domestic	35.58	30.27	28.45
Imported	38.41	32.82	27.95
Composite	36.58	30.83	28.33
Cents per Gallon			
Motor Gasoline, All Types, Retail	138.1	121.0	119.8
No. 2 Heating Oil, Retail	123.9	113.2	103.5

Sources: Energy Information Administration, Form 14, "Refiners' Monthly Cost Report;" Form EIA-9A, "No. 2 Heating Oil Supply/Price Monitoring Report;" Form EIA-782A, "Monthly Petroleum Product Sales Report;" and Form EIA-782B, "Monthly No. 2 Distillate Sales Report." Motor gasoline prices: Bureau of Labor Statistics.

account for part of the increase because of developmental activities associated with new discoveries during the past year, the major offshore lease sale of nearly 40 million acres by the Federal government in May 1983, and anticipated increased demand for petroleum products. Hughes Tool Company, the source of data on rotary rig activity, has forecast the December 1983 rig level to be near 2,600.<sup>2</sup>

A turnaround in geophysical activity also occurred during the first half of 1983. The number of seismic crews searching for oil and gas in the United States and on its Outer Continental Shelf had declined since the peak month of September 1981 when 744 crews were active. By March 1983, the number was 447. In April, the first month-to-month increase occurred. Exploration activity continued at the same level in May and increased substantially in June. Of the 471 active crews in June, 428 were land crews and 43 were on marine vessels, according to the Society of Exploration Geophysicists.<sup>3</sup> Increased activity is expected for the remainder of the year, especially in the offshore area.

Fewer wells were completed during the first 6 months of 1983 than during the comparable period last year, according to the American Petroleum Institute (see Table 3). Because of an increase in the number of shallow wells, the total footage of completed wells also declined. The average depth per well completed during this period was 4,290 feet, 11 percent less than for the corresponding 6 months in 1982. Oil wells accounted for about 47 percent of the well completions. Of the balance, 32 percent were dry holes and 21 percent were gas wells.<sup>4</sup>

**Table 3. Drilling Activity**

	Jan.-Jun. 1981	Jan.-Jun. 1982	Jan.-Jun. 1983
Average Number of Rigs Operating <sup>1</sup>	3,659	3,637	2,108
Total Wells Drilled <sup>2</sup>	33,987	43,718	38,908
Exploratory	6,847	8,821	7,543
Development	27,140	34,897	31,363
Oil	16,345	20,610	18,443
Gas	7,493	9,237	8,056
Dry Holes	10,149	13,871	12,407
Average Depth per Well (feet)	4,618	4,817	4,290

<sup>1</sup>Hughes Tool Company, *Rotary Rigs Running—By State*, (Houston, Texas: 1981-1983).

<sup>2</sup>American Petroleum Institute, *Report on Drilling Activity in the United States*, (Washington, D.C.: January 1981-June 1983).

## Outlook

The outlook for the remainder of 1983 can be summarized as follows:

- Total demand for petroleum products in the last half of 1983 is expected to be above comparable 1982 levels. This projected increase is based on the assumed increase in economic activity and a return to normal winter temperatures in the second half of this year.
- Crude oil production is expected to decline slightly, with increased imports and stock withdrawals meeting the difference between production and demand.
- Prices are expected to remain relatively stable, with some seasonal variations.
- Drilling and geophysical activity are expected to continue the increases begun earlier this year.

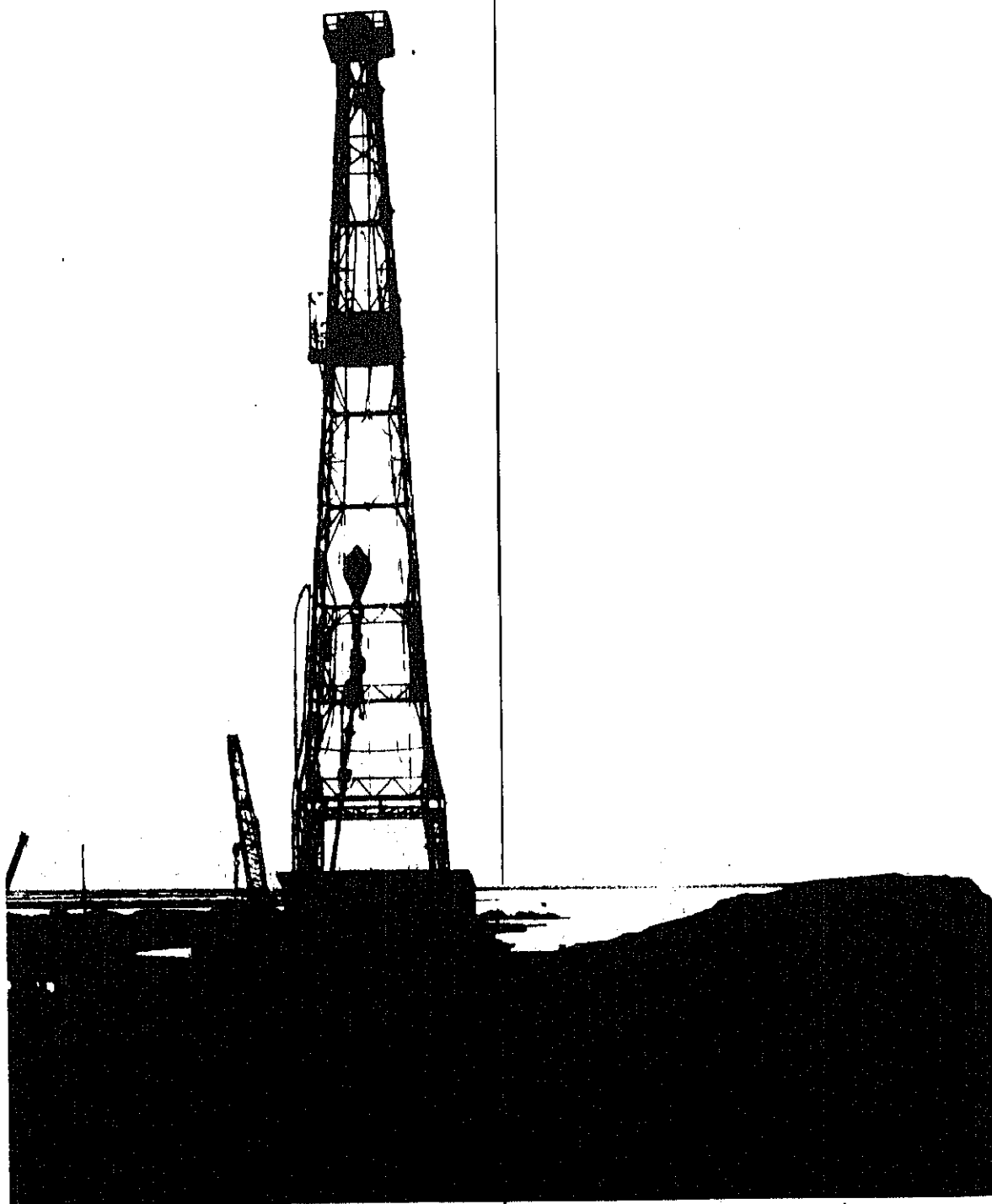
<sup>2</sup>Austin, Thomas S., Jr., Hughes Tool Company, Houston, Texas, presentation before the Independent Petroleum Association of America Supply and Demand Committee, May 24, 1983.

<sup>3</sup>Society of Exploration Geophysicists, News Release, (Tulsa, Oklahoma: July 7, 1983).

<sup>4</sup>American Petroleum Institute, *Report on Drilling Activity in the United States*, (Washington, D.C.: January 1981-June 1983).

# Summary Statistics

1982 Statistics Contained In This Section  
Are Final. They have been extracted from  
the Petroleum Supply Annual which was re-  
leased June 30, 1983.



# Crude Oil<sup>1</sup> and Petroleum Products Overview

		Field Production			Stock Withdrawal <sup>2</sup>			Ending Stocks <sup>3</sup>
		Total Domestic <sup>4</sup>	Crude Oil	Natural Gas Plant Production	Crude Oil <sup>5</sup>	Petroleum Products	Petroleum Products Supplied	Crude Oil <sup>5</sup> and Petroleum Products
Thousand Barrels per Day								Millions of Barrels
1973	AVERAGE	10,975	9,208	1,738	11	-146	17,308	1,008
1974	AVERAGE	10,498	8,774	1,688	-62	-117	16,653	<sup>6</sup> 1,074
1975	AVERAGE	10,045	8,375	1,633	-17	-145	16,322	1,133
1976	AVERAGE	9,774	8,132	1,603	-39	96	17,461	1,112
1977	AVERAGE	9,913	8,245	1,618	-170	-378	18,431	1,312
1978	AVERAGE	10,328	8,707	1,567	-78	172	18,847	1,278
1979	AVERAGE	10,179	8,552	1,584	-148	-25	18,513	1,341
1980	AVERAGE	10,214	8,597	1,573	-98	-42	17,056	<sup>6</sup> 1,392
1981	January	10,231	8,540	1,652	50	1,159	18,430	1,388
	February	10,294	8,604	1,653	-278	250	16,989	1,389
	March	10,272	8,613	1,624	-632	224	15,907	1,401
	April	10,195	8,557	1,599	-595	148	15,350	1,415
	May	10,160	8,501	1,593	-391	-374	15,353	1,438
	June	10,287	8,629	1,594	-135	406	16,095	1,430
	July	10,098	8,500	1,548	-360	91	15,682	1,439
	August	10,243	8,583	1,614	397	-999	15,263	1,457
	September	10,281	8,604	1,612	-285	-341	15,655	1,476
	October	10,225	8,563	1,598	-760	477	15,822	1,485
	November	10,269	8,586	1,630	-325	-233	15,593	1,501
	December	10,220	8,585	1,590	-170	745	16,596	1,484
	AVERAGE	10,230	8,572	1,609	-290	130	16,058	
1982	January	10,128	8,509	1,578	-401	1,298	16,124	1,456
	February	10,312	8,702	1,563	-242	1,230	16,001	1,428
	March	10,284	8,667	1,572	121	1,047	15,560	1,392
	April	10,188	8,591	1,542	-37	1,583	16,046	1,346
	May	10,244	8,683	1,518	29	-66	14,847	1,347
	June	10,212	8,646	1,511	40	-489	14,998	1,360
	July	10,229	8,658	1,513	-147	-926	14,821	1,393
	August	10,215	8,634	1,524	-440	-44	14,839	1,408
	September	10,279	8,701	1,518	263	-447	15,022	1,414
	October	10,299	8,701	1,530	-548	-47	14,859	1,432
	November	10,359	8,697	1,609	-398	-361	15,009	1,455
	December	10,276	8,598	1,628	128	688	15,487	<sup>6</sup> 1,430
	AVERAGE	10,252	8,649	1,550	-136	283	15,296	
1983	January	10,356	8,634	1,668	-567	865	14,765	1,453
	February	10,298	8,660	1,585	-382	1,128	14,772	1,432
	March	10,259	8,677	1,544	56	1,765	15,484	1,375
	April	10,229	8,686	1,502	-438	431	14,779	1,376
	May*	10,231	8,682	1,483	R 68	R-759	R 14,250	R 1,397
	June**	NA	8,676	NA	-74	-316	15,210	1,400
	AVERAGE	NA	8,669	NA	-220	514	14,877	

<sup>1</sup> Includes lease condensate.

<sup>2</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>3</sup> Stocks are totals as of end of period.

<sup>4</sup> Includes crude oil, natural gas plant production, other hydrocarbons and alcohol.

<sup>5</sup> Includes stocks located in the Strategic Petroleum Reserve.

<sup>6</sup> In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years.

The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-1,121, 1980-1,420 and 1982-1,462.

Stock withdrawals during 1975, 1981 and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

\* See Explanatory Note 9.1.

\*\* Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

# Crude Oil<sup>1</sup> and Petroleum Products Overview ( continued )

		Imports			Exports			Net <sup>3</sup> Imports
		Total	Crude Oil <sup>2</sup>	Petroleum Products	Total	Crude Oil	Petroleum Products	
Thousand Barrels per Day								
1973	AVERAGE	6,256	3,244	3,012	231	2	229	6,025
1974	AVERAGE	6,112	3,477	2,635	221	3	218	5,892
1975	AVERAGE	6,056	4,105	1,951	209	6	204	5,846
1976	AVERAGE	7,313	5,287	2,026	223	8	215	7,090
1977	AVERAGE	8,807	6,615	2,193	243	50	193	8,565
1978	AVERAGE	8,363	6,356	2,008	362	158	204	8,002
1979	AVERAGE	8,456	6,519	1,937	472	235	237	7,984
1980	AVERAGE	6,909	5,263	1,646	544	287	258	6,365
1981	January	6,827	4,932	1,895	558	339	219	6,270
	February	6,772	4,873	1,899	569	198	371	6,203
	March	6,028	4,521	1,507	586	210	376	5,442
	April	5,668	4,338	1,330	570	198	372	5,098
	May	5,775	4,287	1,489	595	312	283	5,180
	June	5,435	4,061	1,375	420	123	297	5,015
	July	5,816	4,296	1,521	571	257	314	5,245
	August	5,767	4,179	1,588	644	204	440	5,123
	September	6,365	4,740	1,624	519	194	325	5,845
	October	5,959	4,380	1,579	738	226	512	5,221
	November	5,741	4,046	1,695	701	278	423	5,041
	December	5,843	4,137	1,706	656	189	467	5,187
	AVERAGE	5,996	4,396	1,599	595	228	367	5,401
1982	January	5,332	3,693	1,639	829	238	591	4,503
	February	4,807	2,990	1,817	804	304	499	4,003
	March	4,484	2,874	1,610	882	321	561	3,602
	April	4,378	2,849	1,529	786	174	611	3,593
	May	4,811	3,309	1,503	803	262	542	4,008
	June	5,327	3,836	1,491	703	94	609	4,624
	July	5,890	4,248	1,642	741	229	512	5,149
	August	5,244	3,851	1,392	858	304	554	4,386
	September	5,414	3,636	1,778	791	184	606	4,624
	October	5,306	3,670	1,636	932	270	662	4,374
	November	5,744	3,862	1,882	786	262	524	4,958
	December	4,606	3,000	1,605	860	193	667	3,746
	AVERAGE	5,113	3,488	1,625	815	236	579	4,298
1983	January	4,372	2,938	1,434	973	117	856	3,399
	February	3,691	2,268	1,423	865	262	603	2,825
	March	3,629	2,232	1,398	801	174	627	2,829
	April	4,744	3,154	1,590	809	88	721	3,935
	May*	R 4,898	R 3,234	R 1,664	848	280	568	4,049
	June**	5,100	3,445	1,655	NA	NA	NA	NA
	AVERAGE	4,412	2,884	1,528	NA	NA	NA	NA

<sup>1</sup> Includes lease condensate.

<sup>2</sup> Includes crude oil for storage in the Strategic Petroleum Reserve.

<sup>3</sup> Net Imports = Imports minus Exports.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

\* See Explanatory Note 9.1.

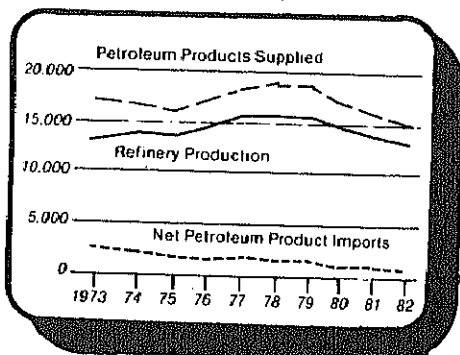
\*\* Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

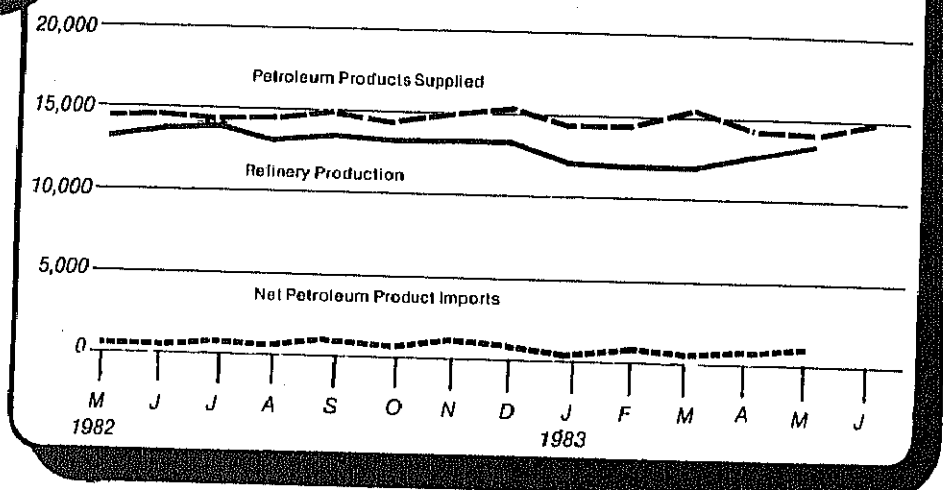
Sources: See "Sources" at the end of this section.

## Petroleum Overview

(Thousand Barrels Per Day)



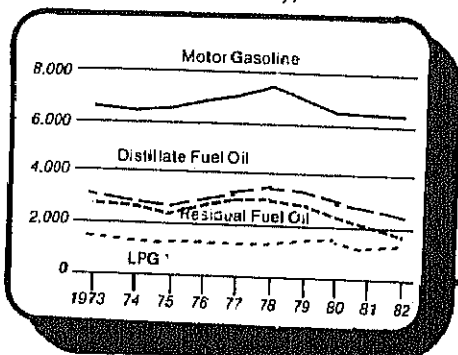
Annual



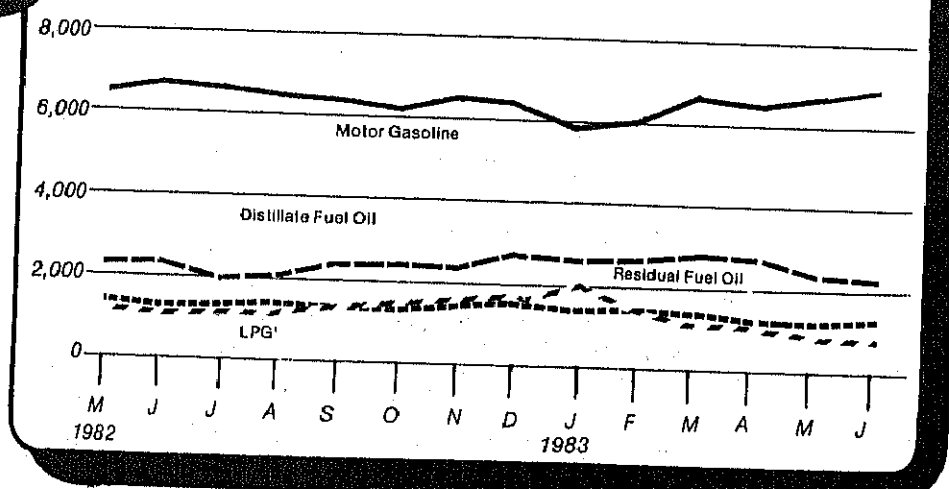
Monthly

## Petroleum Products Supplied

(Thousand Barrels Per Day)



Annual

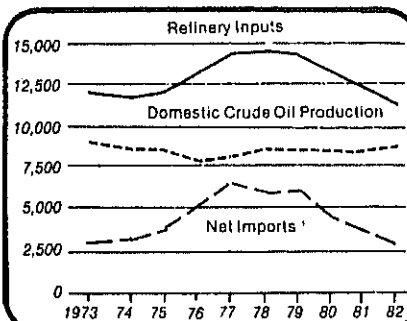


Monthly

<sup>1</sup> Liquefied Petroleum Gases

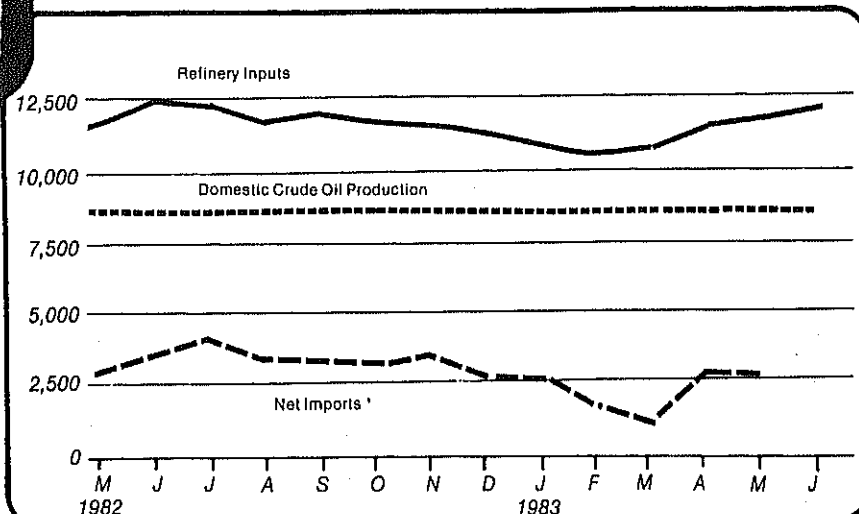
## Crude Oil Supply and Disposition

(Thousand Barrels Per Day)



Annual

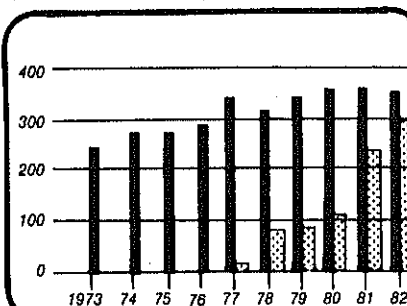
<sup>1</sup> Excludes SPR Imports



Monthly

## Crude Oil Ending Stocks

(Millions of Barrels)

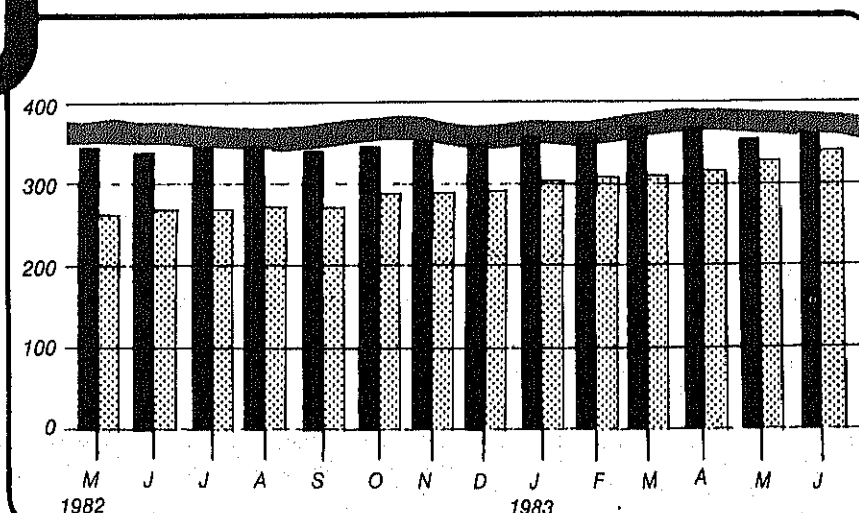


Annual

<sup>1</sup> Level and width of Average Stock Ranges for crude oil is based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.

Legend

- Other Primary
- SPR
- Average Stock Range<sup>1</sup>



Monthly 5

# Crude Oil<sup>1</sup> Supply and Disposition

		Supply						
		Field Production		Imports			Stock Withdrawal <sup>2</sup>	
		Total Domestic	Alaskan	Total	SPR <sup>3</sup>	Other	SPR <sup>3</sup>	Other
		Thousand Barrels per Day						
								Unac- accounted for Crude Oil
1973	AVERAGE	9,208	198	3,244		3,244	11	3
1974	AVERAGE	8,774	193	3,477		3,477	-82	-25
1975	AVERAGE	8,375	191	4,105		4,105	-17	17
1976	AVERAGE	8,132	173	5,287		5,287	-39	77
1977	AVERAGE	8,245	464	6,615	21	6,594	-20	-6
1978	AVERAGE	8,707	1,229	6,356	162	6,195	-163	-57
1979	AVERAGE	8,552	1,401	6,519	67	6,452	-67	-11
1980	AVERAGE	8,597	1,617	5,263	44	5,219	-45	34
1981	January	8,540	1,606	4,932	106	4,826	-151	113
	February	8,604	1,619	4,873	80	4,793	-127	-41
	March	8,613	1,618	4,521	140	4,382	-155	154
	April	8,557	1,608	4,338	272	4,066	-444	51
	May	8,501	1,580	4,287	386	3,901	-513	286
	June	8,629	1,632	4,061	318	3,743	-434	49
	July	8,500	1,605	4,296	175	4,121	-324	147
	August	8,583	1,602	4,179	257	3,922	-372	16
	September	8,604	1,607	4,740	435	4,305	-486	-295
	October	8,563	1,596	4,380	453	3,927	-501	166
	November	8,586	1,614	4,046	271	3,774	-259	279
	December	8,585	1,623	4,137	165	3,971	-252	52
	AVERAGE	8,572	1,609	4,396	256	4,141	-336	83
1982	January	8,509	1,705	3,693	170	3,523	-159	101
	February	8,702	1,707	2,990	159	2,830	-213	156
	March	8,667	1,696	2,874	185	2,689	-235	2
	April	8,591	1,691	2,849	190	2,659	-233	231
	May	8,683	1,707	3,309	204	3,105	-176	111
	June	8,646	1,665	3,836	105	3,732	-105	133
	July	8,658	1,710	4,248	97	4,150	-87	-20
	August	8,634	1,697	3,851	208	3,643	-208	189
	September	8,701	1,705	3,636	139	3,497	-143	-210
	October	8,701	1,706	3,670	216	3,454	-216	249
	November	8,697	1,676	3,862	180	3,683	-179	-124
	December	8,598	1,682	3,000	124	2,877	-125	35
	AVERAGE	8,649	1,696	3,488	165	3,323	-174	71
1983	January	8,634	1,698	2,938	219	2,720	-219	238
	February	8,660	1,725	2,268	197	2,071	-197	423
	March	8,677	1,726	2,232	201	2,031	-184	134
	April	8,686	1,710	3,154	205	2,949	-197	191
	May*	8,682	1,710	R 3,234	R 289	R 2,945	R -293	148
	June**	8,676	1,710	3,445	187	3,258	-188	NA
	AVERAGE	8,669	1,713	2,884	217	2,667	-214	NA

<sup>1</sup> Includes lease condensate.

<sup>2</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>3</sup> Strategic Petroleum Reserve.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

\* See Explanatory Note 9.2.

\*\* Italics denote preliminary data. See Explanatory Note 8.

Note: Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

Crude Oil<sup>1</sup> Supply and Disposition ( continued )

		Supply	Disposition				Ending Stocks <sup>2</sup>		
		Crude Used Directly <sup>3</sup>	Crude Losses	Refinery Inputs	Exports	Product Supplied <sup>3</sup>	Total Crude Oil	SPR <sup>4</sup>	Other Primary
		Thousand Barrels per Day					Millions of Barrels		
1973	AVERAGE	-19	13	12,431	2	NA	242		242
1974	AVERAGE	-15	13	12,133	3	NA	<sup>5</sup> 265		<sup>5</sup> 265
1975	AVERAGE	-17	13	12,442	6	NA	271		271
1976	AVERAGE	-18	15	13,416	8	NA	285		285
1977	AVERAGE	-14	16	14,602	50	NA	348	7	340
1978	AVERAGE	-14	16	14,739	158	NA	376	67	309
1979	AVERAGE	-13	16	14,648	235	NA	430	91	339
1980	AVERAGE	-13	15	13,481	287	NA	<sup>5</sup> 466	108	<sup>5</sup> 358
1981	January	-43	6	13,247	339	NA	486	112	374
	February	-55	3	12,902	198	NA	494	116	378
	March	-57	6	12,383	210	NA	514	121	393
	April	-59	3	12,091	198	NA	532	134	397
	May	-59	3	12,309	312	NA	544	150	394
	June	-58	7	12,415	123	NA	548	163	385
	July	-58	7	12,261	257	NA	559	173	386
	August	-58	5	12,908	204	NA	547	185	382
	September	-61	4	12,505	194	NA	555	199	356
	October	-63	3	12,057	226	NA	579	215	364
	November	-64	4	12,240	278	NA	589	223	366
	December	-63	4	12,349	189	NA	594	230	363
	AVERAGE	-58	5	12,470	228	NA			
1982	January	-63	3	11,599	238	NA	606	235	371
	February	-64	2	11,236	304	NA	613	241	372
	March	-63	5	11,276	321	NA	609	249	361
	April	-65	3	11,392	174	NA	610	256	355
	May	-62	3	11,806	262	NA	609	261	348
	June	-60	7	12,494	94	NA	608	264	344
	July	-60	3	12,446	229	NA	613	267	346
	August	-57	2	11,871	304	NA	626	274	353
	September	-56	4	12,146	184	NA	619	278	341
	October	-51	2	11,749	270	NA	636	285	351
	November	-51	1	11,724	262	NA	648	290	358
	December	-53	1	11,514	193	NA	<sup>5</sup> 644	294	<sup>5</sup> 350
	AVERAGE	-59	3	11,774	236	NA			
1983	January	NA	2	11,070	117	54	661	301	361
	February	NA	3	10,635	262	69	672	306	366
	March	NA	2	10,854	174	70	670	312	359
	April	NA	2	11,436	88	68	684	318	366
	May*	NA	1	R 11,789	280	63	R 681	327	R 355
	June**	NA	NA	12,323	NA	NA	688	332	356
	AVERAGE	NA	NA	11,357	NA	NA			

<sup>1</sup> Includes lease condensate.

<sup>2</sup> Stocks are totals as of end of period.

<sup>3</sup> Beginning in January 1983, crude oil used directly as fuel is presented as product supplied for crude oil. Prior to January 1983 crude oil used directly was included with crude oil losses in this table and with product supplied for distillate and residual fuel oils.

<sup>4</sup> Strategic Petroleum Reserve.

<sup>5</sup> In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis) end of year stocks would be: 1974-265, 1980-483 (Total) and 375 (Other Primary), and 1982-644 (Total) and 350 (Other Primary).

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

\* See Explanatory Note 9.2.

\*\* Italics denote preliminary data. See Explanatory Note 8.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.



# Finished Motor Gasoline Supply and Disposition

		Supply			Disposition				Ending Stocks <sup>1</sup>	
		Total Production	Imports <sup>2</sup>	Stock With-drawal <sup>2 3</sup>	Exports	Product Supplied			Total Motor Gasoline <sup>4</sup>	Finished Motor Gasolin
						Total	Unleaded <sup>5</sup>	Unleaded		
Thousand Barrels per Day								Percent of Total	Millions of Barrels	
1973	AVERAGE	6,535	134	9	4	6,674	NA	NA	209	
1974	AVERAGE	6,360	204	-24	2	6,537	NA	NA	<sup>6</sup> 218	
1975	AVERAGE	6,520	184	-28	2	6,675	NA	NA	235	
1976	AVERAGE	6,841	131	10	3	6,978	NA	NA	231	
1977	AVERAGE	7,033	217	-72	2	7,177	1,976	27.5	258	
1978	AVERAGE	7,169	190	54	1	7,412	2,521	34.0	238	
1979	AVERAGE	6,852	181	2	( <sup>5</sup> )	7,034	2,798	39.8	237	
1980	AVERAGE	6,506	140	-66	1	6,579	3,067	46.6	<sup>6</sup> 261	
1981	January	6,715	138	-421	( <sup>5</sup> )	6,431	3,141	48.8	276	227
	February	6,308	111	-118	1	6,301	3,095	49.1	284	230
	March	6,213	171	-81	( <sup>5</sup> )	6,303	3,097	49.1	285	232
	April	6,114	186	303	( <sup>5</sup> )	6,602	3,284	49.7	272	223
	May	6,122	150	344	1	6,615	3,115	47.1	259	213
	June	6,220	186	622	1	7,028	3,419	48.6	242	194
	July	6,405	151	268	( <sup>5</sup> )	6,823	3,424	50.2	228	186
	August	6,611	124	-95	3	6,637	3,344	50.4	233	189
	September	6,564	169	-70	2	6,662	3,338	50.1	237	191
	October	6,426	147	7	3	6,578	3,257	49.5	236	190
	November	6,564	148	-338	1	6,373	3,198	50.2	248	201
	December	6,586	197	-91	11	6,681	3,444	51.5	253	203
	AVERAGE	6,405	157	28	2	6,588	3,264	49.5		
1982	January	6,167	128	-316	18	5,961	3,067	51.5	261	213
	February	5,899	133	172	8	6,196	3,210	51.8	257	208
	March	5,994	183	334	44	6,466	3,358	51.9	247	198
	April	6,095	185	650	33	6,897	3,495	50.7	221	179
	May	6,319	182	177	23	6,655	3,415	51.3	214	173
	June	6,754	230	-134	14	6,835	3,565	52.2	219	177
	July	6,768	225	-178	24	6,790	3,577	52.7	226	183
	August	6,419	291	-81	16	6,614	3,526	53.3	227	185
	September	6,527	223	-198	22	6,531	3,404	52.1	234	191
	October	6,262	185	-42	15	6,391	3,351	52.4	234	192
	November	6,273	211	101	11	6,574	3,451	52.5	230	189
	December	6,542	178	-165	7	6,549	3,485	53.2	<sup>6</sup> 235	<sup>6</sup> 194
	AVERAGE	6,338	197	25	20	6,539	3,409	52.1		
1983	January	6,020	148	-186	( <sup>5</sup> )	5,981	3,352	56.0	251	208
	February	5,848	142	32	( <sup>5</sup> )	6,022	3,257	54.1	251	207
	March	5,897	205	765	23	6,843	3,620	52.9	224	184
	April	6,202	273	27	1	6,501	3,505	53.9	221	183
	May*	R 6,386	R 284	R -128	1	R 6,540	3,547	54.2	R 225	R 187
	June**	6,608	286	42	NA	6,923	NA	NA	222	184
	AVERAGE	6,163	224	94	NA	6,473	NA	NA		

<sup>1</sup> Stocks are totals as of end of period.

<sup>2</sup> Beginning in 1981, excludes blending components.

<sup>3</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>4</sup> Includes motor gasoline blending components.

<sup>5</sup> Includes gasohol.

<sup>6</sup> In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-225, 1980-263, 1982-244 (Total) and 203 (Finished). Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

(<sup>5</sup>) = Less than 500 barrels per day. NA = Not available. R = Revised data.

\* See Explanatory Note 9.3.

\*\* Italics denote preliminary data. See Explanatory Note 8.

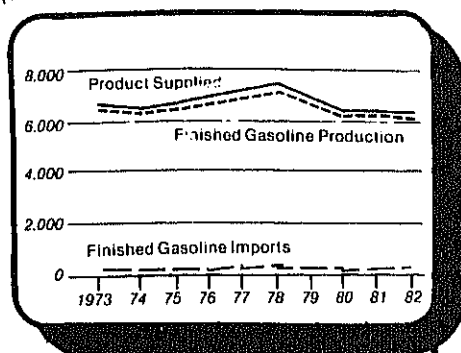
Note: Beginning in January 1981, survey forms were modified.

Geographic coverage: The 50 United States and the District of Columbia.

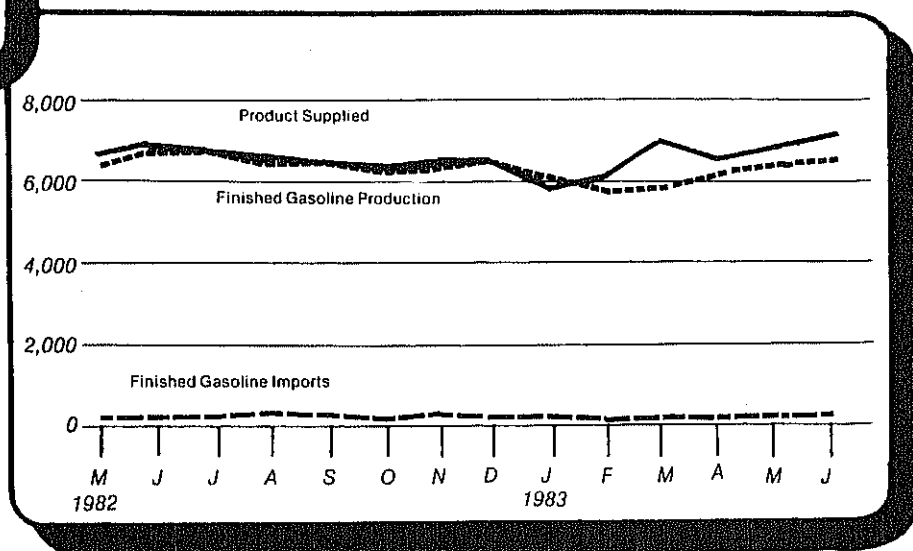
Sources: See "Sources" at the end of this section.

## Motor Gasoline Supply and Disposition

(Thousand Barrels Per Day)



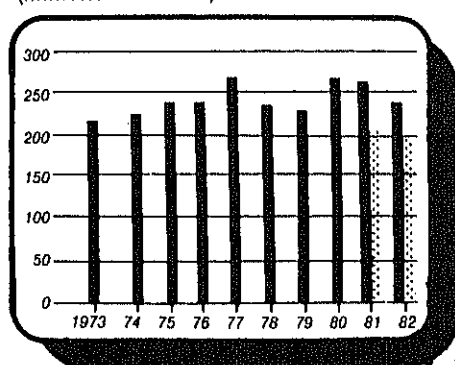
Annual



Monthly

## Motor Gasoline Ending Stocks

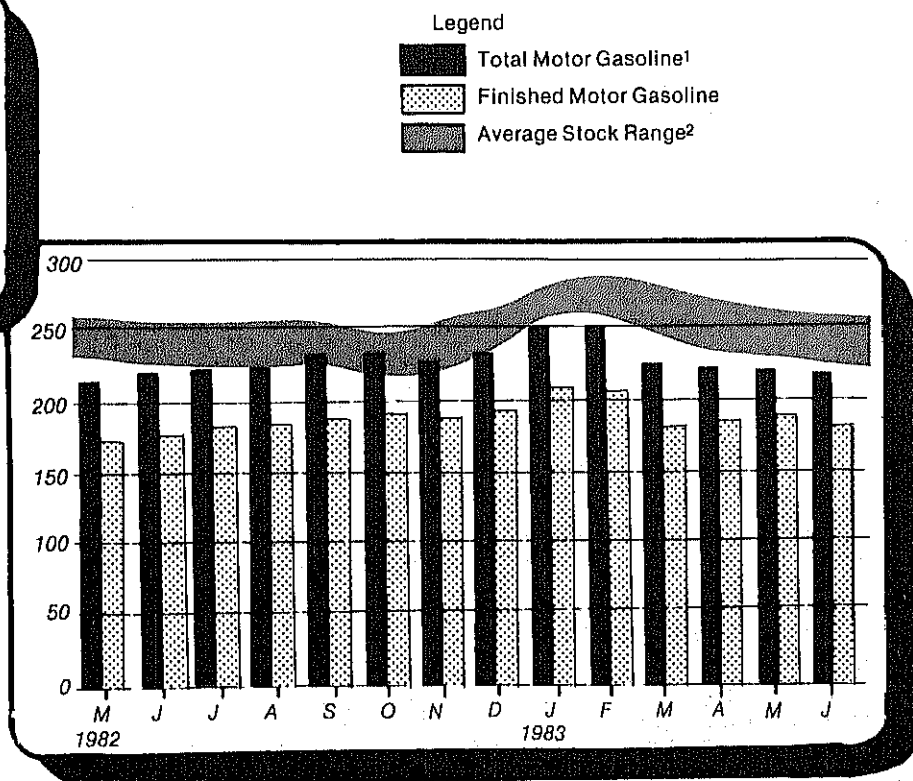
(Millions of Barrels)



Annual

<sup>1</sup> Includes finished motor gasoline blending components

<sup>2</sup> Level and width of Average Stock Range for total motor gasoline based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.



Monthly

# Distillate Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks <sup>1</sup>
		Total Production	Imports	Stock Withdrawal <sup>2</sup>	Crude Used Directly <sup>3</sup>	Exports	Product Supplied <sup>3</sup>	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	2,822	392	-115	2	9	3,092	196
1974	AVERAGE	2,669	289	-9	2	2	2,948	<sup>4</sup> 200
1975	AVERAGE	2,654	155	40	2	1	2,851	209
1976	AVERAGE	2,924	146	62	1	1	3,133	186
1977	AVERAGE	3,278	250	-176	1	1	3,352	250
1978	AVERAGE	3,167	173	93	1	3	3,432	216
1979	AVERAGE	3,153	193	-34	1	3	3,311	229
1980	AVERAGE	2,662	142	64	1	3	2,866	<sup>4</sup> 205
1981	January	2,989	273	836	11	( <sup>5</sup> )	4,109	179
	February	2,809	325	246	11	17	3,373	173
	March	2,484	147	264	9	( <sup>5</sup> )	2,904	164
	April	2,418	116	-9	10	3	2,532	165
	May	2,454	179	-232	10	( <sup>5</sup> )	2,411	172
	June	2,501	225	-270	9	( <sup>5</sup> )	2,464	180
	July	2,395	179	-204	10		2,378	186
	August	2,656	174	-450	8	( <sup>5</sup> )	2,388	200
	September	2,610	129	-235	10	1	2,513	207
	October	2,485	119	197	9	5	2,803	201
	November	2,716	124	36	11	6	2,880	200
	December	2,856	95	277	11	26	3,212	192
	AVERAGE	2,613	173	38	10	5	2,829	
1982	January	2,591	97	876	10	90	3,484	164
	February	2,427	132	605	11	90	3,085	147
	March	2,288	48	682	10	84	2,945	126
	April	2,358	59	612	13	64	2,978	108
	May	2,618	74	-183	10	75	2,444	114
	June	2,729	102	-335	10	55	2,452	124
	July	2,734	125	-789	11	24	2,058	148
	August	2,507	80	-339	10	40	2,218	159
	September	2,657	61	-85	12	139	2,507	161
	October	2,838	91	-289	8	66	2,581	170
	November	2,860	145	-514	8	24	2,475	186
	December	2,655	109	225	10	143	2,855	<sup>4</sup> 179
	AVERAGE	2,606	93	35	10	74	2,671	
1983	January	2,314	58	561	NA	173	2,760	168
	February	2,136	58	742	NA	105	2,832	147
	March	1,991	42	926	NA	59	2,900	119
	April	2,169	73	518	NA	47	2,713	103
	May*	R 2,444	R 141	R -193	NA	50	R 2,341	R 109
	June**	2,577	169	-166	NA	NA	2,527	112
	AVERAGE	2,273	90	395	NA	NA	2,677	

<sup>1</sup> Stocks are totals as of end of period.

<sup>2</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>3</sup> Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.

<sup>4</sup> In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-224, 1980-205, and 1982-186. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

(\*) = Less than 500 barrels per day. NA = Not available. R = Revised data.

Totals may not equal sum of components due to independent rounding.

\* See Explanatory Note 9.4.

\*\* Italics denote preliminary data. See Explanatory Note 8.

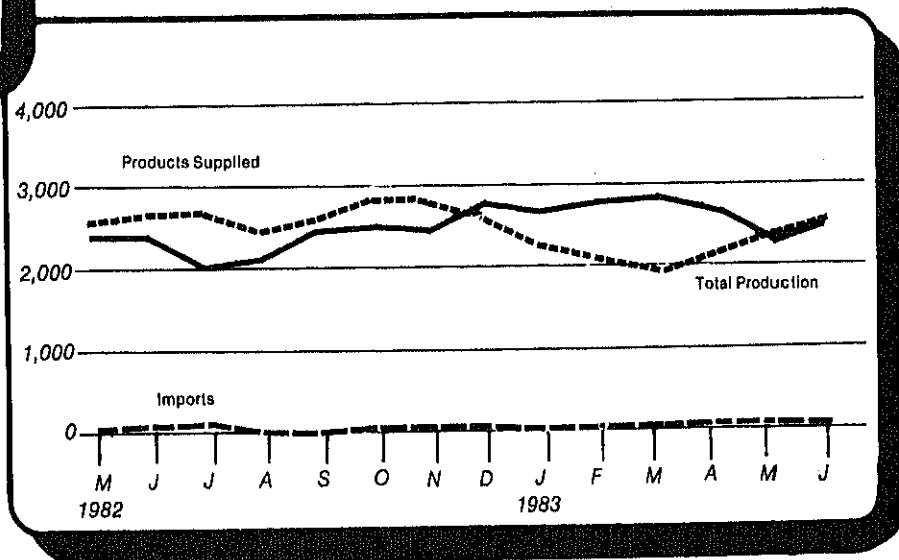
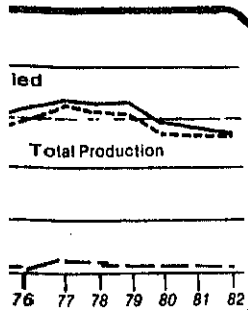
Note: Beginning in January 1981, survey forms were modified.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

## Oil Supply and Disposition

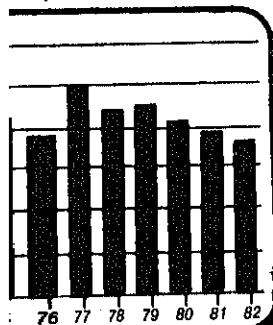
(Millions of Barrels Per Day)



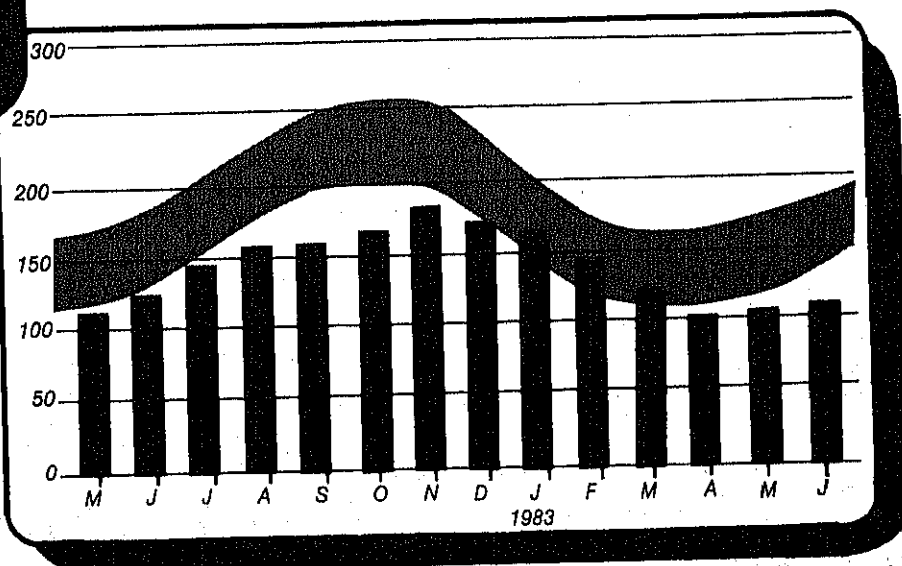
Monthly

## Oil Ending Stocks

(Millions of Barrels)



Legend  
Average Stock Range



Month of Average Stock  
Late fuel oil is based  
data, January 1980-  
1982. See Explanatory

Monthly

11

# Residual Fuel Oil Supply and Disposition

	Supply				Disposition		Ending Stocks <sup>1</sup>
	Total Production	Imports	Stock Withdrawal <sup>2</sup>	Crude Used Directly <sup>3</sup>	Exports	Product Supplied <sup>3</sup>	
	Thousand Barrels per Day						Millions of Barrels
1973 AVERAGE	971	1,853	5	17	23	2,822	53
1974 AVERAGE	1,070	1,587	-17	13	14	2,639	<sup>4</sup> 60
1975 AVERAGE	1,235	1,223	2	15	15	2,462	74
1976 AVERAGE	1,377	1,413	5	17	12	2,801	72
1977 AVERAGE	1,754	1,359	-48	13	6	3,071	90
1978 AVERAGE	1,867	1,355	-1	13	13	3,023	90
1979 AVERAGE	1,687	1,151	-15	12	9	2,826	98
1980 AVERAGE	1,580	939	10	12	33	2,508	<sup>4</sup> 92
1981 January	1,612	1,015	302	32	65	2,896	82
February	1,565	954	150	44	125	2,588	78
March	1,424	699	100	48	145	2,126	75
April	1,320	584	66	49	151	1,868	73
May	1,223	741	-170	49	25	1,817	78
June	1,232	540	291	49	76	2,037	69
July	1,174	830	2	48	82	1,971	69
August	1,231	819	-179	50	69	1,852	75
September	1,292	841	-176	51	126	1,882	80
October	1,238	786	8	54	202	1,884	80
November	1,227	880	-49	53	203	1,909	81
December	1,329	916	110	52	157	2,250	78
AVERAGE	1,321	800	37	48	118	2,088	
1982 January	1,235	831	301	53	235	2,185	69
February	1,186	956	363	53	213	2,344	58
March	1,123	912	12	53	197	1,903	58
April	1,166	788	150	52	234	1,923	54
May	1,128	742	-172	52	191	1,560	59
June	1,074	652	-57	50	217	1,501	61
July	1,028	657	56	49	239	1,550	59
August	985	551	203	47	235	1,531	53
September	1,008	872	-306	44	148	1,470	62
October	955	783	-57	43	234	1,490	64
November	989	837	-94	43	182	1,591	66
December	989	747	6	43	186	1,598	<sup>4</sup> 66
AVERAGE	1,070	776	32	48	209	1,716	
1983 January	935	691	243	NA	294	1,574	61
February	857	632	270	NA	191	1,568	53
March	833	686	220	NA	169	1,569	46
April	942	743	-10	NA	310	1,364	47
May*	R 930	R 709	R -139	NA	190	R 1,310	R 51
June**	887	618	-3	NA	NA	1,267	49
AVERAGE	898	681	95	NA	NA	1,441	

<sup>1</sup> Stocks are totals as of end of period.

<sup>2</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>3</sup> Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

<sup>4</sup> In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-75, 1980-91, and 1982-68. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

NA = Not available. R = Revised data.

\* See Explanatory Note 9.4.

\*\* Italics denote preliminary data. See Explanatory Note 8.

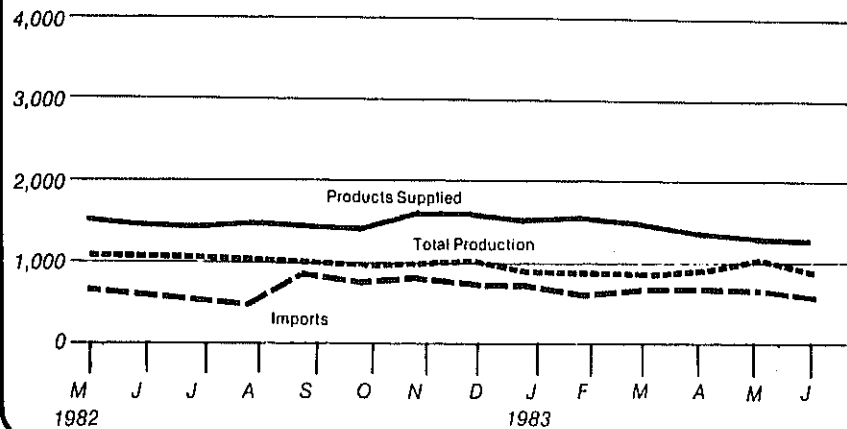
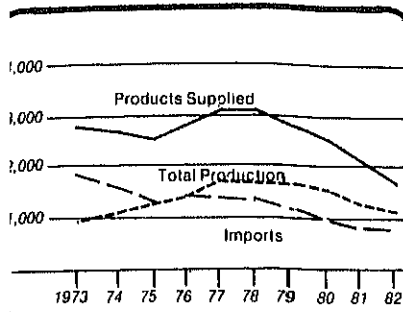
Note: Beginning in January 1981, survey forms were modified.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

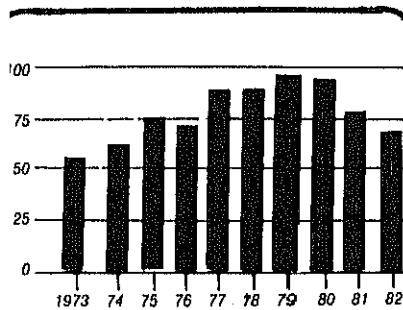
## Residual Fuel Oil Supply and Disposition

Thousand Barrels Per Day)

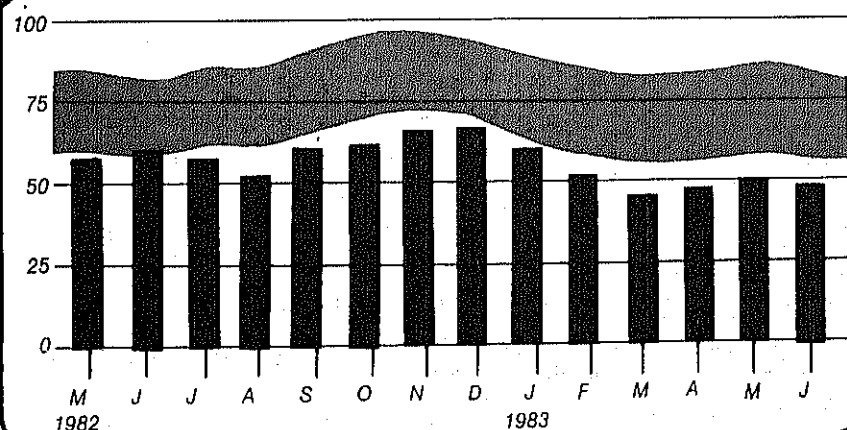


## Residual Fuel Oil Ending Stocks

Millions of Barrels)



Level and width of Average Stock Range for residual fuel oil based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.



# Liquefied Petroleum Gases Supply and Disposition

		Supply			Disposition			Ending Stocks <sup>1</sup>
		Total Production	Imports	Stock Withdrawal <sup>2</sup>	Refinery Inputs	Exports	Product Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	1,600	132	-35	220	27	1,449	99
1974	AVERAGE	1,565	123	-38	220	25	1,408	<sup>3</sup> 113
1975	AVERAGE	1,527	112	-35	246	26	1,333	125
1976	AVERAGE	1,535	130	24	260	25	1,404	116
1977	AVERAGE	1,566	161	-55	233	18	1,422	136
1978	AVERAGE	1,537	123	12	239	20	1,413	132
1979	AVERAGE	1,556	217	70	236	15	1,592	111
1980	AVERAGE	1,535	216	-27	233	21	1,469	<sup>3</sup> 120
1981	January	1,617	306	363	352	21	1,913	117
	February	1,593	327	173	303	21	1,769	112
	March	1,551	260	-4	257	20	1,530	112
	April	1,586	214	-236	221	26	1,308	119
	May	1,587	189	-258	230	19	1,279	127
	June	1,567	206	-208	237	24	1,304	133
	July	1,507	213	-258	215	17	1,229	141
	August	1,592	195	-242	235	149	1,160	149
	September	1,622	199	-75	287	21	1,438	151
	October	1,593	287	72	320	76	1,556	149
	November	1,571	280	86	383	58	1,495	146
	December	1,468	255	379	428	50	1,624	135
	AVERAGE	1,571	244	-18	289	42	1,466	
1982	January	1,565	314	443	391	67	1,863	121
	February	1,466	291	243	327	51	1,621	114
	March	1,544	223	211	289	74	1,615	108
	April	1,506	188	98	257	77	1,458	105
	May	1,565	186	-71	234	43	1,403	107
	June	1,515	192	-86	262	106	1,254	109
	July	1,476	227	-13	253	37	1,399	110
	August	1,511	125	-45	254	61	1,276	111
	September	1,538	247	37	274	85	1,463	110
	October	1,517	194	97	306	81	1,421	107
	November	1,542	267	175	363	37	1,583	102
	December	1,580	258	256	395	56	1,642	<sup>3</sup> 94
	AVERAGE	1,528	226	111	300	65	1,499	
1983	January	1,662	240	618	313	118	2,088	84
	February	1,560	305	84	237	76	1,636	81
	March	1,517	166	-51	189	127	1,316	83
	April	1,531	124	-107	198	116	1,232	86
	May*	1,545	167	-326	207	84	1,094	96
	AVERAGE	1,563	199	44	229	105	1,472	

<sup>1</sup> Stocks are totals as of end of period.

<sup>2</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>3</sup> In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-113, 1980-128, and 1982-103. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

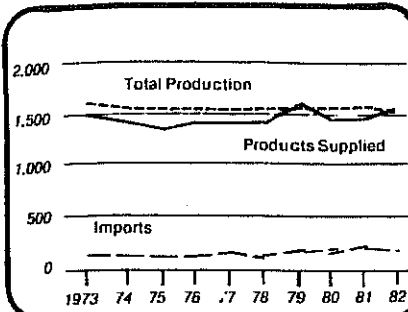
\* See Explanatory Note 9.5.

Geographic coverage: The 50 United States and the District of Columbia.

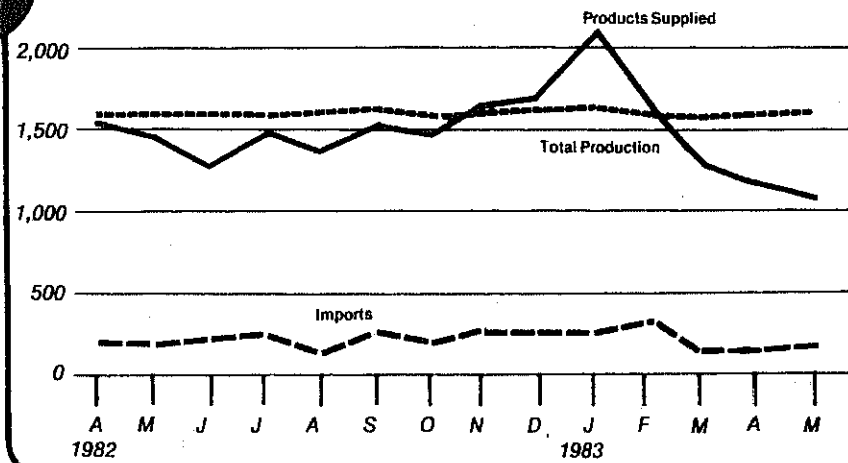
Sources: See "Sources" at the end of this section.

## Liquefied Petroleum Gases Supply and Disposition

(Thousand Barrels Per Day)



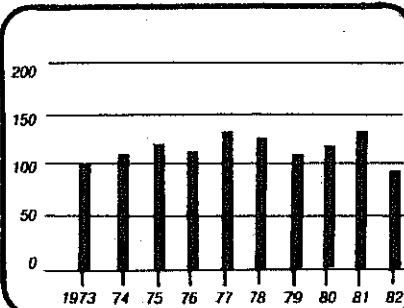
Annual



Monthly

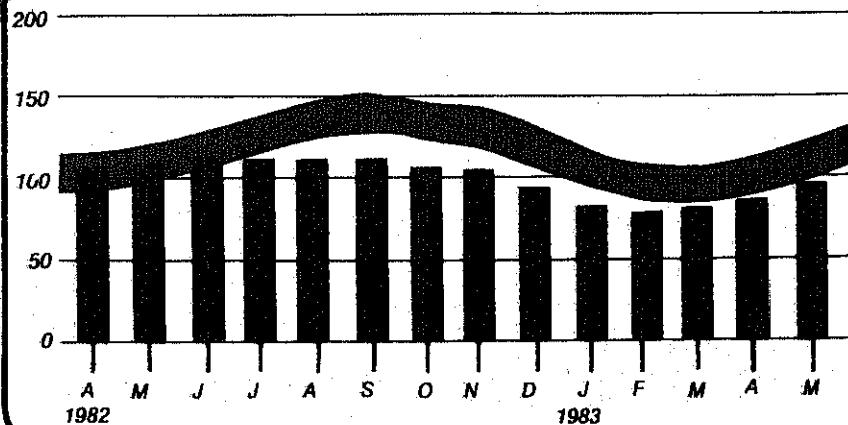
## Liquefied Petroleum Gases Ending Stocks

(Millions of Barrels)



Annual

<sup>1</sup> Level and width of Average Stock range for liquefied petroleum gases based on 3 years of data, January 1980-December 1982. See Explanatory Note 6.



Monthly



# Other Petroleum Products<sup>1</sup> Supply and Disposition

		Supply			Disposition			Ending Stocks <sup>2</sup>
		Total Production	Imports	Stock Withdrawal <sup>3</sup>	Refinery Inputs	Exports	Products Supplied	
		Thousand Barrels per Day						Millions of Barrels
1973	AVERAGE	3,693	502	-9	750	166	3,270	208
1974	AVERAGE	3,558	432	-28	665	174	3,123	<sup>4</sup> 218
1975	AVERAGE	3,424	277	-2	537	160	3,002	219
1976	AVERAGE	3,643	206	-5	524	175	3,145	220
1977	AVERAGE	3,912	205	-27	514	165	3,410	230
1978	AVERAGE	4,046	166	14	492	167	3,568	225
1979	AVERAGE	4,153	195	-37	352	209	3,749	238
1980	AVERAGE	3,956	210	-23	311	198	3,634	<sup>4</sup> 247
1981								
	January	3,821	162	80	851	132	3,081	296
	February	3,723	182	-200	538	208	2,958	302
	March	3,722	230	-55	642	210	3,043	304
	April	3,711	230	24	733	192	3,040	303
	May	3,892	229	-58	594	238	3,231	305
	June	3,925	218	-29	656	197	3,261	306
	July	3,852	149	284	791	212	3,282	297
	August	3,876	276	-33	676	219	3,225	298
	September	3,718	285	215	883	176	3,159	291
	October	3,503	241	193	710	227	3,000	285
	November	3,579	262	33	784	154	2,935	284
	December	3,543	243	71	805	223	2,829	282
	AVERAGE	3,739	226	46	723	199	3,088	
1982								
	January	3,171	269	-7	624	180	2,631	282
	February	3,403	305	-153	663	138	2,755	287
	March	3,466	243	-191	725	161	2,631	293
	April	3,408	309	73	796	204	2,790	290
	May	3,317	318	184	824	210	2,785	285
	June	3,547	315	123	812	216	2,954	281
	July	3,660	408	-1	856	187	3,023	281
	August	3,583	346	217	743	202	3,201	274
	September	3,533	375	105	749	213	3,051	271
	October	3,529	383	244	915	266	2,976	264
	November	3,498	423	-28	837	269	2,786	264
	December	3,324	313	366	885	275	2,842	<sup>4</sup> 253
	AVERAGE	3,453	334	80	787	211	2,869	
1983								
	January	3,222	297	-371	570	271	2,307	271
	February	3,270	287	-1	680	232	2,645	271
	March	3,400	298	-94	570	249	2,786	273
	April	3,363	377	3	596	247	2,901	273
	May*	3,448	364	26	694	242	2,902	273
	AVERAGE	3,342	325	-90	621	249	2,708	

<sup>1</sup> Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.

<sup>2</sup> Stocks are totals as of end of period.

<sup>3</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>4</sup> In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-220, 1980-249, and 1982-259. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

Totals may not equal sum of components due to independent rounding.

\* See Explanatory Note 9.6.

Geographic Coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

# Crude Oil and Petroleum Product Imports from OPEC Sources<sup>1</sup>

	Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC <sup>2</sup>	Total OPEC	Total Arab OPEC <sup>3</sup>
	Thousand Barrels per Day										
<b>1973</b>											
<b>AVERAGE</b>	136	164	486	71	213	223	459	1,135	106	2,993	915
<b>1974</b>											
<b>AVERAGE</b>	190	4	461	74	300	469	713	979	88	3,280	752
<b>1975</b>											
<b>AVERAGE</b>	282	232	715	117	390	280	762	702	122	3,601	1,383
<b>1976</b>											
<b>AVERAGE</b>	432	453	1,230	254	539	298	1,025	700	134	5,066	2,424
<b>1977</b>											
<b>AVERAGE</b>	559	723	1,380	335	541	535	1,143	690	287	6,193	3,185
<b>1978</b>											
<b>AVERAGE</b>	649	654	1,144	385	573	555	919	645	226	5,751	2,963
<b>1979</b>											
<b>AVERAGE</b>	636	658	1,356	281	420	304	1,080	690	212	5,637	3,056
<b>1980</b>											
<b>AVERAGE</b>	488	554	1,261	172	348	9	857	481	130	4,300	2,551
<b>1981</b>											
January	341	500	1,284	93	424	0	908	549	27	4,127	2,219
February	381	468	1,122	93	406	0	866	463	92	3,891	2,064
March	352	485	1,027	47	328	0	771	360	54	3,425	1,912
April	263	485	1,034	68	307	0	812	237	39	3,245	1,867
May	393	443	933	17	297	0	664	331	124	3,203	1,796
June	356	380	865	60	367	0	528	248	118	2,922	1,703
July	333	251	1,073	80	340	0	651	466	38	3,233	1,757
August	348	274	1,082	61	377	0	321	523	84	3,070	1,765
September	336	154	1,477	96	371	0	323	359	149	3,264	2,063
October	242	147	1,342	90	427	0	412	389	172	3,220	1,820
November	210	132	1,270	112	353	0	517	535	56	3,184	1,724
December	176	122	1,045	158	400	0	684	411	132	3,129	1,502
<b>AVERAGE</b>	311	319	1,129	81	366	0	620	406	90	3,323	1,848
<b>1982</b>											
January	254	161	877	111	289	0	663	376	128	2,859	1,403
February	139	92	693	89	244	0	584	355	102	2,297	1,054
March	91	37	555	155	200	0	522	399	91	2,051	860
April	85	0	511	122	215	0	427	426	85	1,871	740
May	179	0	601	116	236	0	222	422	54	1,830	897
June	115	0	593	94	215	72	537	361	110	2,096	820
July	159	0	660	108	327	69	910	356	95	2,685	965
August	181	0	489	133	271	27	574	299	133	2,107	818
September	179	0	432	57	191	21	477	518	69	1,943	677
October	249	7	494	61	242	108	313	504	106	2,084	810
November	247	14	489	47	283	34	479	528	115	2,235	797
December	155	0	237	12	265	88	462	399	73	1,690	421
<b>AVERAGE</b>	170	26	552	92	248	35	514	412	97	2,146	854
<b>1983</b>											
January	204	0	282	47	255	43	186	324	43	1,384	533
February	104	0	214	9	217	0	92	371	28	1,035	326
March	63	0	103	0	138	0	121	425	173	1,023	183
April	228	0	180	( <sup>5</sup> )	210	0	186	508	125	1,438	409
May	284	0	122	12	324	37	352	444	69	1,645	419
<b>AVERAGE</b>	178	0	180	14	229	16	189	414	89	1,309	375

<sup>1</sup> Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil processed in OPEC countries.

<sup>2</sup> Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

<sup>3</sup> Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.

(<sup>5</sup>) Less than 500 barrels.

Totals may not equal sum of components due to independent rounding.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

Sources: See "Sources" at the end of this section.

# Crude Oil and Petroleum Product Imports from Non-OPEC Sources<sup>1</sup>

	Bahamas	Canada	Mexico	Netherlands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico <sup>2</sup>	Virgin Islands <sup>2</sup>	Other	Total
Thousand Barrels per Day										
<b>1973</b>										
<b>AVERAGE</b>	174	1,325	16	585	255	15	99	329	465	3,263
<b>1974</b>										
<b>AVERAGE</b>	164	1,070	8	511	251	8	90	391	340	2,832
<b>1975</b>										
<b>AVERAGE</b>	152	846	71	332	242	14	90	406	300	2,454
<b>1976</b>										
<b>AVERAGE</b>	118	599	87	275	274	31	88	422	353	2,247
<b>1977</b>										
<b>AVERAGE</b>	171	517	179	211	289	126	105	466	550	2,614
<b>1978</b>										
<b>AVERAGE</b>	160	467	318	229	253	180	94	429	484	2,613
<b>1979</b>										
<b>AVERAGE</b>	147	538	439	231	190	202	92	431	548	2,819
<b>1980</b>										
<b>AVERAGE</b>	78	455	533	225	176	176	88	388	491	2,609
<b>1981</b>										
January	39	543	401	198	150	233	89	494	552	2,701
February	84	546	437	227	163	271	46	481	626	2,881
March	74	472	488	227	93	263	45	370	571	2,603
April	68	412	418	198	139	402	40	365	380	2,423
May	122	365	522	213	105	368	58	344	474	2,573
June	51	353	538	196	124	397	67	262	525	2,513
July	77	382	384	212	178	553	50	206	541	2,583
August	69	378	489	255	123	592	68	184	539	2,698
September	111	423	708	163	169	528	72	265	661	3,100
October	63	449	669	161	121	351	60	303	562	2,739
November	63	547	628	168	108	253	76	294	421	2,557
December	70	501	587	148	125	280	73	367	563	2,714
<b>AVERAGE</b>	74	447	522	197	133	375	62	327	534	2,672
<b>1982</b>										
January	58	513	425	179	106	346	62	334	452	2,474
February	67	537	476	221	120	181	38	362	508	2,510
March	43	437	503	189	118	294	62	307	480	2,433
April	82	360	476	184	166	247	36	266	690	2,507
May	77	419	766	152	95	516	47	302	607	2,981
June	32	481	797	148	129	557	58	322	708	3,231
July	64	536	783	158	118	433	38	376	698	3,204
August	80	443	853	145	106	520	24	317	650	3,137
September	92	493	897	195	89	631	51	278	746	3,472
October	45	459	682	148	109	666	52	262	801	3,222
November	51	553	860	212	90	623	81	334	706	3,508
December	88	561	689	174	102	438	48	336	480	2,916
<b>AVERAGE</b>	65	482	685	175	112	456	50	316	627	2,968
<b>1983</b>										
January	68	536	849	218	73	315	40	299	588	2,988
February	92	592	722	179	81	193	50	192	554	2,655
March	86	488	760	187	78	240	43	162	563	2,606
April	167	452	981	216	85	421	20	183	781	3,306
May	135	501	944	153	108	483	42	235	651	3,252
<b>AVERAGE</b>	110	513	853	191	85	333	39	215	628	2,965

<sup>1</sup> Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

<sup>2</sup> U.S. Possessions.

Totals may not equal sum of components due to independent rounding.

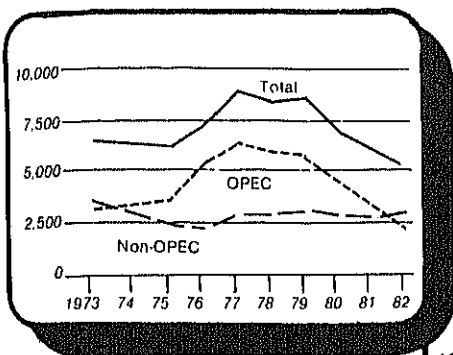
Note: Beginning in October 1977, Strategic Petroleum Reserve Imports are included.

Geographic coverage: The 50 United States and the District of Columbia.

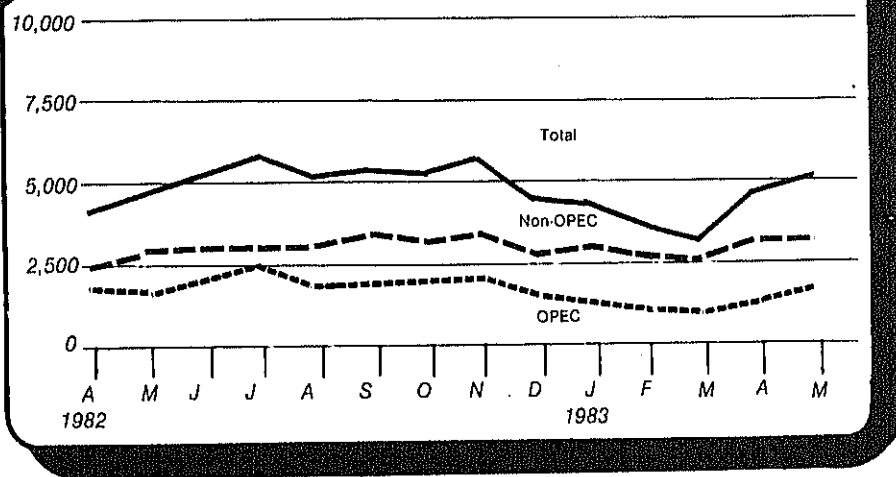
Sources: See "Sources" at the end of this section.

## Crude Oil (including SPR) and Petroleum Products Imports

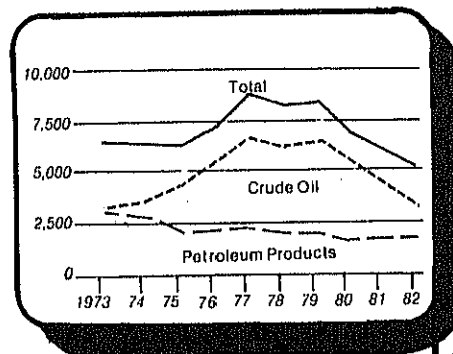
(Thousand Barrels Per Day)



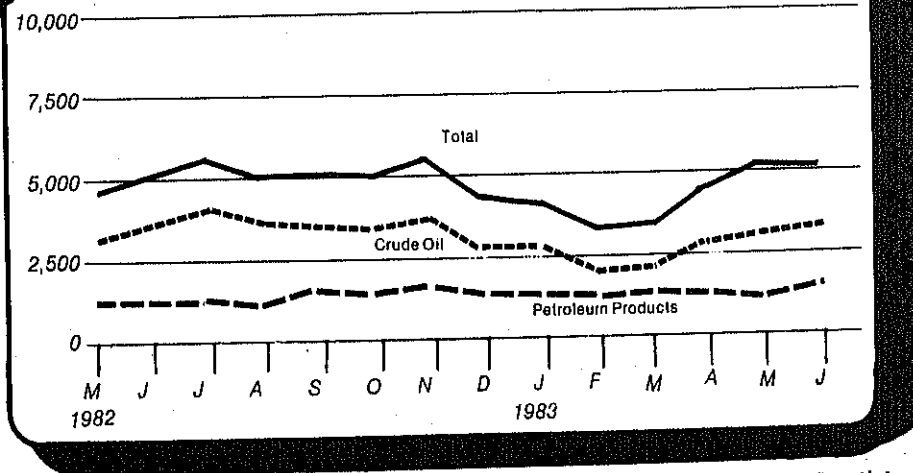
Annual



Monthly



Annual



Monthly

# Sources

1. 1973 through 1976: Bureau of Mines, U.S. Department of the Interior, *Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, Mineral Industry Surveys.
2. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Monthly Petroleum Statistics Report*, (unleaded gasoline category).
3. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, Energy Data Reports.
4. January 1981 through December 1982: Energy Information Administration, U.S. Department of Energy, *Petroleum Supply Annual*.
5. January 1983 through May 1983: Detailed statistics in appropriate issues of the *Petroleum Supply Monthly*. (See Explanatory Notes 9.1 through 9.6).
6. June 1983: Estimates based on EIA weekly data (except domestic crude oil production) (see Explanatory Note 1.1).
7. January 1983 through June 1983: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies the U.S. Geological Survey. (See Explanatory Note 3).

## Detailed Statistics





Table 1. U.S. Petroleum Balance, May 1983

	Current Month		Year-to-date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
Crude Oil (Including Lease Condensate)				
Field Production				
(1) Alaska .....	E 53,016	1,710	E 258,773	1,714
(2) Lower 48 States .....	E 216,135	6,972	E 1,050,100	6,954
(3) Total U.S. ....	E 269,151	8,682	E 1,308,873	8,668
Net Imports				
(4) Imports (Gross Excluding SPR) .....	91,302	2,945	385,018	2,550
(5) SPR Imports .....	8,950	289	33,617	223
(6) Exports .....	8,688	280	27,659	183
(7) Imports (Net Including SPR) .....	91,564	2,954	390,976	2,589
Other Sources				
(8) SPR Withdrawal (+) or Addition (-) .....	-9,098	-293	-33,006	-219
(9) Other Stock Withdrawal (+) or Addition (-) .....	11,211	362	-4,560	-30
(10) Product Supplied and Losses .....	-1,978	-64	-10,019	-66
(11) Unaccounted for <sup>1</sup> .....	4,598	148	33,680	223
(12) Total Other Sources .....	4,733	153	-13,905	-92
(13) Crude Input to Refineries .....	365,448	11,789	1,685,944	11,165
(13) = (3) + (7) + (12)				
Natural Gas Plant Liquids (NGPL)				
(14) Field Production .....	45,977	1,483	234,983	1,556
(15) Imports <sup>2</sup> .....	603	19	1,617	11
(16) Stock Withdrawal (+) or Addition (-) <sup>2</sup> .....	199	6	-2,062	-14
(17) Total NGPL Supply .....	46,779	1,509	234,538	1,553
Other Liquids				
Unfinished Oils and Gasoline Blending Components, Total				
(18) Stock Withdrawal (+) or Addition (-) .....	1,620	53	-3,213	-21
(19) Imports .....	8,171	264	33,759	224
(20) Other Hydrocarbons and Alcohol New Supply (Field Production) .....	2,021	65	7,589	50
(21) Refinery Processing Gain <sup>1</sup> .....	15,959	515	70,946	470
(22) Crude Oil Product Supplied .....	1,941	63	9,747	65
(23) Total Other Liquids .....	29,721	959	118,828	787
(23) = (18) through (22)				
(24) Total Production of Products <sup>3</sup> .....	441,948	14,256	2,039,309	13,505
(24) = (13) + (17) + (23)				
Net Imports of Refined Products <sup>3</sup>				
(25) Imports (Gross) .....	42,801	1,381	191,516	1,268
(26) Exports .....	17,609	568	102,138	676
(27) Imports (Net) .....	25,191	813	89,378	592
(28) Total New Supply of Products .....	467,139	15,069	2,128,688	14,097
(28) = (24) + (27)				
(29) Refined Products Stock Withdrawal (+) or Addition (-) <sup>3</sup> .....	-25,386	-819	107,749	714
(30) Total Petroleum Products Supplied for Domestic Use .....	441,753	14,250	2,236,437	14,811
(30) = (28) + (29)				
(31) Finished Motor Gasoline .....	202,749	6,540	963,947	6,384
(32) Distillate Fuel Oil .....	72,582	2,341	408,708	2,707
(33) Residual Fuel Oil .....	40,610	1,310	222,893	1,476
(34) Liquefied Petroleum Gases .....	33,920	1,094	222,230	1,472
(35) Other <sup>4</sup> .....	89,950	2,902	408,914	2,708
(36) Crude Oil .....	1,941	63	9,747	65
(37) Total Product Supplied .....	441,752	14,250	2,236,438	14,811
(37) = (31) through (36)				
Ending Stocks, All Oils				
(38) Crude Oil and Lease Condensate (Excluding SPR) .....	354,604	--	354,604	--
(39) Strategic Petroleum Reserve (SPR) .....	326,833	--	326,833	--
(40) Unfinished Oils .....	112,402	--	112,402	--
(41) Gasoline Blending Components .....	38,633	--	38,633	--
(42) Natural Gasoline and Unfractionated Stream <sup>2</sup> .....	13,530	--	13,530	--
(43) Finished Refined Products <sup>3</sup> .....	551,107	--	551,107	--
(44) Total Stocks .....	1,397,109	--	1,397,109	--

<sup>1</sup> A balancing item.

<sup>2</sup> Includes isopentane, natural gasoline, unfractionated stream, and plant condensate only.

<sup>3</sup> For products included see Explanatory Note 9.7.

<sup>4</sup> Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.

E = Estimated.

-- Not Applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.



Table 2. Supply and Disposition of Crude Oil and Petroleum Products, May 1983  
(Thousands of Barrels)

Commodity	Supply				Disposition				Ending Stocks	
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Crude Losses	Refinery Inputs	Exports		Products Supplied
<b>Crude Oil (including lease condensate)</b>	E 269,151	0	100,252	2,113	4,598	37	365,448	8,688	1,941	681,437
<b>Natural Gas Liquids and LRGs</b>	45,670	10,041	5,769	-9,901	0	0	12,606	2,616	36,357	109,650
Natural Gasoline and Isopentane	8,207	0	0	-432	0	0	5,340	0	2,435	5,942
Unfractionated Stream	-605	0	0	605	0	0	0	0	0	7,184
Plant Condensate	212	0	603	26	0	0	839	0	2	404
Liquefied Petroleum Gases	37,856	10,041	5,166	-10,100	0	0	6,427	2,616	33,920	96,120
Ethane	7,631	418	1,118	-1,068	0	0	90	(s)	8,009	6,229
Propane	13,320	8,462	1,323	-7,072	0	0	127	1,718	14,188	47,816
Butane	5,993	855	999	-1,565	0	0	4,148	897	1,237	18,592
Butane-Propane Mixtures	159	250	362	366	0	0	213	0	924	1,091
Ethane-Propane Mixtures	7,989	0	1,363	211	0	0	0	0	9,563	13,365
Isobutane	2,764	56	0	-972	0	0	1,849	0	-1	9,027
<b>Other Liquids</b>	2,021	0	8,171	1,629	0	0	15,346	0	-3,525	151,035
Other Hydrocarbons and Alcohol	2,021	0	0	-27	0	0	1,994	0	0	313
Unfinished Oils	0	0	7,404	1,698	0	0	8,685	0	417	112,402
Motor Gasoline Blending Components	0	0	767	82	0	0	4,791	0	-3,942	37,811
Aviation Gasoline Blending Components	0	0	0	-124	0	0	-124	0	0	509
<b>Finished Petroleum Products</b>	307	399,318	37,635	-15,286	0	0	0	14,994	406,980	454,987
Finished Motor Gasoline	48	197,906	8,796	-3,956	0	0	0	44	202,749	186,865
Finished Leaded Motor Gasoline	24	90,852	5,700	-3,751	0	0	0	44	92,781	94,719
Finished Unleaded Motor Gasoline	24	107,054	3,095	-205	0	0	0	0	109,968	92,146
Naphtha-Type Jet Fuel	89	624	(s)	-5	0	0	0	0	708	2,434
Kerosene-Type Jet Fuel	0	7,008	0	-306	0	0	0	0	6,702	6,707
Kerosene	0	24,147	1,090	-734	0	0	0	(s)	24,463	34,583
Distillate Fuel Oil	5	2,659	137	74	0	0	0	40	2,872	8,233
Residual Fuel Oil	2	75,765	4,367	-5,993	0	0	0	2	72,582	109,176
Naphtha < 400 Deg. for Petro. Feed. Use	0	28,836	21,975	-4,318	0	0	0	1,559	5,883	50,932
Other Oils > 400 Deg. for Petro. Feed. Use	0	4,722	295	124	0	0	0	186	4,955	2,122
Special Naphthas	0	7,571	0	-207	0	0	0	437	6,927	1,963
Lubricants	118	1,684	570	-212	0	0	0	32	2,129	3,338
Waxes	0	4,505	125	524	0	0	0	458	4,696	12,129
Petroleum Coke	0	457	11	-15	0	0	0	19	434	785
Asphalt and Road Oil	0	13,053	0	-334	0	0	0	0	6,459	6,952
Still Gas	0	12,321	248	279	0	0	0	54	12,794	27,020
Miscellaneous Products	0	16,568	0	0	0	0	0	0	16,568	0
	45	1,492	20	-207	0	0	0	20	1,330	1,748
<b>Total</b>	<b>317,149</b>	<b>409,359</b>	<b>151,826</b>	<b>-21,445</b>	<b>4,598</b>	<b>37</b>	<b>393,400</b>	<b>26,297</b>	<b>441,753</b>	<b>1,397,109</b>

<sup>1</sup> Unaccounted for crude oil is a balancing item.  
(s) Less than 500 Barrels per day.

<sup>1</sup> Unaccounted for crude oil is a balancing item.

(s) Less than 500 Barrels per day.

E = Estimated.

Note: Totals may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January-May 1983  
(Thousands of Barrels)

Commodity	Supply			Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 1,308,873	0	418,635	-37,566	33,680	272	1,685,944	27,659	9,747	681,437
Natural Gas Liquids and LRGs	233,196	44,930	31,603	4,536	0	0	65,806	15,819	232,640	109,650
Natural Gasoline and Isopentane	36,476	0	235	45	0	0	26,357	0	10,399	5,942
Unfractionated Stream	3,314	0	0	-3,145	0	0	169	0	0	7,184
Plant Condensate	2,298	0	1,381	1,038	0	0	4,707	0	10	404
Liquefied Petroleum Gases	191,108	44,930	29,986	6,598	0	0	34,573	15,819	222,230	96,120
Ethane	38,075	1,827	6,695	-258	0	0	402	(S)	46,037	6,229
Propane	67,295	39,908	7,947	10,421	0	0	644	10,360	114,567	47,816
Butane	30,762	2,674	7,039	-1,910	0	0	19,443	5,459	13,663	18,592
Butane-Propane Mixtures	900	331	2,710	1,034	0	0	1,008	0	3,967	1,091
Ethane-Propane Mixtures	39,862	0	5,595	-2,083	0	0	0	0	43,374	13,365
Isobutane	14,214	90	0	-606	0	0	13,076	0	622	9,027
Other Liquids	7,589	0	33,759	-3,213	0	0	62,554	0	-24,419	151,035
Other Hydrocarbons and Alcohol	7,589	0	0	-2	0	0	7,587	0	0	313
Unfinished Oils	0	0	29,429	-7,125	0	0	33,293	0	-10,989	112,402
Motor Gasoline Blending Components	0	0	4,329	3,931	0	0	21,092	0	-12,832	37,811
Aviation Gasoline Blending Components	0	0	0	-17	0	0	582	0	-599	509
Finished Petroleum Products	1,788	1,840,320	161,530	101,151	0	0	0	86,319	2,018,470	454,987
Finished Motor Gasoline	407	916,768	31,928	15,672	0	0	0	828	963,947	186,865
Finished Leaded Motor Gasoline	277	415,298	19,333	7,436	0	0	0	828	441,516	94,719
Finished Unleaded Motor Gasoline	130	501,470	12,596	8,236	0	0	0	0	522,432	92,146
Finished Aviation Gasoline	248	2,968	210	-120	0	0	0	0	3,306	2,434
Naphtha-Type Jet Fuel	0	32,014	(S)	482	0	0	0	200	32,296	6,707
Kerosene-Type Jet Fuel	1	120,195	3,698	-2,582	0	0	0	578	120,733	34,583
Kerosene	17	17,147	851	2,559	0	0	0	6	20,568	8,233
Distillate Fuel Oil	9	334,106	11,280	76,403	0	0	0	13,092	408,706	109,176
Residual Fuel Oil	0	135,871	104,633	17,297	0	0	0	34,908	222,893	50,932
Naphtha < 400 Deg. for Petro. Feed. Use	0	20,671	1,766	-155	0	0	0	611	21,671	2,122
Other Oils > 400 Deg. for Petro. Feed. Use	0	40,185	6	217	0	0	0	2,105	38,303	1,963
Special Naphthas	421	7,958	2,465	136	0	0	0	394	10,586	3,338
Lubricants	0	20,604	1,059	1,052	0	0	0	2,306	20,409	12,129
Waxes	0	2,150	132	1	0	0	0	99	2,184	785
Petroleum Coke	0	80,217	0	-231	0	0	0	30,861	29,125	6,952
Asphalt and Road Oil	0	43,651	541	-9,751	0	0	0	188	34,253	27,020
Still Gas	0	77,353	0	0	0	0	0	0	77,353	0
Miscellaneous Products	685	8,462	2,960	171	0	0	0	142	12,136	1,748
Total	1,551,446	1,885,250	645,527	64,908	33,680	272	1,814,304	129,797	2,236,438	1,397,109

<sup>1</sup> Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, May 1983  
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock With-drawal(+)-Addition(-)	Unac-counted For Crude Oil <sup>1</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,682	0	3,234	68	148	1	11,789	280	63
Natural Gas Liquids and LRGs	1,473	324	186	-319	0	0	407	84	1,173
Natural Gasoline and Isopentane	265	0	0	-14	0	0	172	0	79
Unfractionated Stream	-20	0	0	20	0	0	0	0	(s)
Plant Condensate	7	0	19	1	0	0	27	0	(s)
Liquefied Petroleum Gases	1,221	324	167	-326	0	0	207	84	1,094
Ethane	246	13	36	-34	0	0	3	(s)	258
Propane	430	273	43	-228	0	0	4	55	458
Butane	193	28	32	-50	0	0	134	29	40
Butane-Propane Mixtures	5	8	12	12	0	0	7	0	30
Ethane-Propane Mixtures	258	0	44	7	0	0	0	0	308
Isobutane	89	2	0	-31	0	0	60	0	(s)
Other Liquids	65	0	264	53	0	0	495	0	-114
Other Hydrocarbons and Alcohol	65	0	0	-1	0	0	64	0	0
Unfinished Oils	0	0	239	55	0	0	280	0	13
Motor Gasoline Blending Components	0	0	25	3	0	0	155	0	-127
Aviation Gasoline Blending Components	0	0	0	-4	0	0	-4	0	(s)
Finished Petroleum Products	10	12,881	1,214	-493	0	0	0	484	13,128
Finished Motor Gasoline	2	6,384	284	-128	0	0	0	1	6,540
Finished Leaded Motor Gasoline	1	2,931	184	-121	0	0	0	0	2,993
Finished Unleaded Motor Gasoline	1	3,453	100	-7	0	0	0	0	3,547
Finished Aviation Gasoline	3	20	(s)	(s)	0	0	0	0	23
Naphtha-Type Jet Fuel	0	226	0	-10	0	0	0	(s)	216
Kerosene-Type Jet Fuel	0	779	35	-24	0	0	0	1	789
Kerosene	(s)	86	4	2	0	0	0	(s)	93
Distillate Fuel Oil	(s)	2,444	141	-193	0	0	0	50	2,341
Residual Fuel Oil	0	930	709	-139	0	0	0	190	1,310
Naphtha < 400 Deg. for Petro. Feed. Use	0	152	10	4	0	0	0	6	160
Other Oils > 400 Deg. for Petro. Feed. Use	0	244	0	-7	0	0	0	14	223
Special Naphthas	4	54	18	-7	0	0	0	1	69
Lubricants	0	145	4	17	0	0	0	15	151
Waxes	0	15	(s)	(s)	0	0	0	1	14
Petroleum Coke	0	421	0	-11	0	0	0	202	208
Asphalt and Road Oil	0	397	8	9	0	0	0	2	413
Still Gas	0	534	0	0	0	0	0	0	534
Miscellaneous Products	1	48	1	-7	0	0	0	1	43
Total	10,231	13,205	4,898	-692	148	1	12,690	848	14,250
1 Unaccounted for crude oil is a balancing item.									

<sup>1</sup> Unaccounted for crude oil is a balancing item.

(s) Less than 500 Barrels per day.

E = Estimated.

Note: Totals may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January-May 1983  
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,668	0	2,772	-249	223	2	11,165	183	65
Natural Gas Liquids and LRGs	1,544	298	209	30	0	0	436	105	1,541
Natural Gasoline and Isopentane	242	0	2	(s)	0	0	175	0	69
Unfractionated Stream	22	0	0	-21	0	0	1	0	(s)
Plant Condensate	15	0	9	7	0	0	31	0	(s)
Liquefied Petroleum Gases	1,266	298	199	44	0	0	229	105	1,472
Ethane	252	13	44	-2	0	0	3	(s)	305
Propane	446	264	53	69	0	0	4	69	759
Butane	204	18	47	-13	0	0	129	36	90
Butane-Propane Mixtures	6	2	18	7	0	0	7	0	26
Ethane-Propane Mixtures	264	0	37	-14	0	0	0	0	287
Isobutane	94	1	0	-4	0	0	87	0	4
Other Liquids	50	0	224	-21	0	0	414	0	-162
Other Hydrocarbons and Alcohol	50	0	0	(s)	0	0	50	0	0
Unfinished Oils	0	0	195	-47	0	0	220	0	-73
Motor Gasoline Blending Components	0	0	29	26	0	0	140	0	-85
Aviation Gasoline Blending Components	0	0	0	(s)	0	0	4	0	-4
Finished Petroleum Products	12	12,188	1,070	670	0	0	0	572	13,367
Finished Motor Gasoline	3	6,071	211	104	0	0	0	5	6,384
Finished Leaded Motor Gasoline	2	2,750	128	49	0	0	0	5	2,924
Finished Unleaded Motor Gasoline	1	3,321	83	55	0	0	0	0	3,460
Finished Aviation Gasoline	2	20	1	-1	0	0	0	0	22
Naphtha-Type Jet Fuel	0	212	(s)	3	0	0	0	1	214
Kerosene-Type Jet Fuel	(s)	796	24	-17	0	0	0	4	800
Kerosene	(s)	114	6	17	0	0	0	(s)	136
Distillate Fuel Oil	(s)	2,213	75	506	0	0	0	87	2,707
Residual Fuel Oil	0	900	693	115	0	0	0	231	1,476
Naphtha < 400 Deg. for Petro. Feed. Use	0	137	12	-1	0	0	0	4	144
Other Oils > 400 Deg. for Petro. Feed. Use	0	266	(s)	1	0	0	0	14	254
Special Naphthas	3	53	16	1	0	0	0	3	70
Lubricants	0	136	7	7	0	0	0	15	135
Waxes	0	14	1	(s)	0	0	0	1	14
Petroleum Coke	0	399	0	-2	0	0	0	204	193
Asphalt and Road Oil	0	288	4	-65	0	0	0	1	227
Still Gas	0	512	0	0	0	0	0	0	512
Miscellaneous Products	5	56	20	1	0	0	0	1	80
Total	10,274	12,485	4,275	430	223	2	12,015	860	14,811

<sup>1</sup> Unaccounted for crude oil is a balancing item.

(s) Less than 500 barrels per day.

E = Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, May 1983  
(Thousands of Barrels)

Commodity	Supply				Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 2,523	0	25,334	174	1,805	3,518	6	33,344	4	0	16,217
Natural Gas Liquids and LRGs	465	1,475	403	-342	0	1,692	0	270	128	3,295	4,550
Liquefied Petroleum Gases	317	1,475	310	-339	0	1,692	0	250	128	3,077	4,503
Other Products <sup>2</sup>	148	0	93	-3	0	0	0	20	0	218	47
Other Liquids	108	0	3,128	-1,197	0	790	0	3,976	0	-1,147	18,452
Other Hydrocarbons and Alcohol	108	0	0	-33	0	0	0	75	0	0	77
Unfinished Oils	0	0	3,128	-1,085	0	708	0	3,784	0	-1,033	14,135
Motor Gasoline Blending Components	0	0	0	-54	0	82	0	142	0	-114	4,215
Aviation Gasoline Blending Components	0	0	0	-25	0	0	0	-25	0	0	25
Finished Petroleum Products	44	38,120	30,994	-11,338	0	72,530	0	0	464	129,887	145,138
Finished Motor Gasoline	44	18,970	7,323	-2,759	0	43,334	0	0	1	66,911	59,399
Finished Leaded Motor Gasoline	23	7,093	4,605	-1,845	0	17,394	0	0	1	27,269	29,564
Finished Unleaded Motor Gasoline	21	11,877	2,718	-914	0	25,940	0	0	0	39,642	29,835
Finished Aviation Gasoline	0	0	(5)	-125	0	232	0	0	0	107	545
Naphtha-Type Jet Fuel	0	739	0	-166	0	484	0	0	(5)	1,057	551
Kerosene-Type Jet Fuel	0	876	840	476	0	8,357	0	0	0	10,549	8,930
Kerosene	0	112	136	-110	0	400	0	0	2	536	3,841
Distillate Fuel Oil	0	7,922	3,612	-5,393	0	15,965	0	0	2	22,104	37,202
Residual Fuel Oil	0	2,806	18,638	-3,576	0	2,132	0	0	(5)	20,000	23,847
Naphtha and Other Oils for Petrochem.											
Feedstock	0	373	13	-7	0	219	0	0	101	497	47
Special Naphthas	0	44	106	-239	0	232	0	0	4	139	799
Lubricants	0	622	95	-55	0	796	0	0	82	1,376	3,457
Waxes	0	96	4	-1	0	7	0	0	4	103	170
Petroleum Coke	0	1,114	0	-89	0	0	0	0	220	805	833
Asphalt and Road Oil	0	2,567	225	708	0	235	0	0	36	3,698	5,183
Still Gas	0	1,663	0	0	0	0	0	0	0	1,663	0
Miscellaneous Products	0	216	2	-2	0	137	0	0	11	342	334
Total	3,140	39,595	59,859	-12,703	1,805	78,530	6	37,590	595	132,035	184,357

<sup>1</sup> Unaccounted for crude oil is a balancing item.

<sup>2</sup> Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(5) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 7. PAD District II Supply and Disposition of Crude Oil and Petroleum Products, May 1983  
(Thousands of Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 31,794	0	14,000	-892	36,409	1,304	6	82,299	310	0	82,056
Natural Gas Liquids and LRGs	9,027	2,529	3,711	-3,721	0	2,025	0	3,646	597	9,328	35,504
Liquefied Petroleum Gases	8,720	2,529	3,711	-3,384	0	327	0	2,327	597	8,979	31,544
Other Products <sup>2</sup>	307	0	0	-337	0	1,698	0	1,319	0	349	3,960
Other Liquids	1,070	0	641	2,186	0	1,033	0	2,647	0	2,283	27,128
Other Hydrocarbons and Alcohol	1,070	0	0	4	0	0	0	1,074	0	0	119
Unfinished Oils	0	0	548	1,536	0	-1	0	-360	0	2,443	19,108
Motor Gasoline Blending Components	0	0	94	740	0	1,034	0	2,027	0	-159	7,706
Aviation Gasoline Blending Components	0	0	0	-94	0	0	0	-94	0	0	195
Finished Petroleum Products	8	90,242	1,054	2,011	0	14,980	0	0	601	107,694	120,970
Finished Motor Gasoline	0	54,615	232	-5	0	9,050	0	0	21	63,872	56,923
Finished Leaded Motor Gasoline	0	27,300	187	-418	0	4,849	0	0	21	31,897	29,936
Finished Unleaded Motor Gasoline	0	27,315	46	413	0	4,201	0	0	0	31,975	26,987
Finished Aviation Gasoline	0	64	0	40	0	125	0	0	0	229	614
Naphtha-Type Jet Fuel	0	923	0	223	0	213	0	0	0	1,359	1,521
Kerosene-Type Jet Fuel	0	4,026	0	-913	0	1,263	0	0	0	4,376	8,157
Kerosene	0	-32	0	280	0	62	0	0	(3)	310	1,957
Distillate Fuel Oil	0	15,878	181	2,844	0	4,082	0	0	1	22,983	30,406
Residual Fuel Oil	0	2,052	500	-107	0	-429	0	0	0	2,016	3,548
Naphtha and Other Oils for Petro. Feed	0	555	54	-46	0	21	0	0	33	551	303
Special Naphthas	0	426	58	-43	0	134	0	0	1	575	522
Lubricants	0	783	7	65	0	359	0	0	13	1,201	2,126
Waxes	0	42	3	4	0	0	0	0	1	48	76
Petroleum Coke	0	3,508	0	-243	0	0	0	0	528	2,737	2,056
Asphalt and Road Oil	0	3,680	12	-104	0	214	0	0	1	3,801	12,611
Still Gas	0	3,565	0	0	0	0	0	0	0	3,565	0
Miscellaneous Products	8	157	7	16	0	-114	0	0	2	73	150
Total	41,899	92,771	19,407	-416	36,409	19,342	6	88,592	1,508	119,306	265,658

<sup>1</sup> Unaccounted for crude oil is a balancing item.

<sup>2</sup> Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(3) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 8. PAD District III Supply and Disposition of Crude Oil and Petroleum Products, May 1983  
(Thousands of Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 129,338	0	52,448	-1,057	-27,195	16,919	9	170,414	0	30	484,230
Natural Gas Liquids and LRGs	32,779	4,483	790	-5,453	0	-2,832	0	7,512	1,734	20,521	66,508
Liquefied Petroleum Gases	27,392	4,483	361	-5,961	0	-2,079	0	3,125	1,734	19,336	57,615
Other Products <sup>2</sup>	5,387	0	430	508	0	-753	0	4,387	0	1,185	8,893
Other Liquids	446	0	3,839	1,001	0	-1,823	0	8,246	0	-4,783	67,800
Other Hydrocarbons and Alcohol	446	0	0	2	0	0	0	448	0	0	110
Unfinished Oils	0	0	3,605	789	0	-707	0	4,705	0	-1,018	51,149
Motor Gasoline Blending Components	0	0	234	189	0	-1,116	0	3,072	0	-3,765	16,312
Aviation Gasoline Blending Components	0	0	0	21	0	0	0	21	0	0	229
Finished Petroleum Products	249	187,676	3,238	-5,218	0	-91,277	0	0	5,617	89,050	123,694
Finished Motor Gasoline	0	88,359	0	-1,515	0	-54,006	0	0	(S)	32,838	47,711
Finished Leaded Motor Gasoline	0	39,763	0	-1,920	0	-23,135	0	0	(S)	14,708	23,902
Finished Unleaded Motor Gasoline	0	48,596	0	405	0	-30,871	0	0	0	18,130	23,809
Finished Aviation Gasoline	89	346	0	40	0	-357	0	0	0	118	680
Naphtha-Type Jet Fuel	0	3,269	0	-115	0	-929	0	0	0	2,225	2,603
Kerosene-Type Jet Fuel	0	11,907	28	-334	0	-10,359	0	0	0	1,242	11,039
Kerosene	5	2,300	1	17	0	-462	0	0	0	1,861	2,024
Distillate Fuel Oil	2	37,659	490	-2,734	0	-20,397	0	0	369	14,651	28,757
Residual Fuel Oil	0	12,462	2,101	-1,079	0	-2,332	0	0	2,040	9,112	14,498
Naphtha and Other Oils for Petro. Feed	0	10,515	228	-95	0	-240	0	0	369	10,039	3,158
Special Naphthas	118	1,080	388	104	0	-366	0	0	24	1,300	1,648
Lubricants	0	2,702	(S)	600	0	-1,331	0	0	314	1,658	5,094
Waxes	0	246	1	-7	0	-7	0	0	10	223	453
Petroleum Coke	0	4,939	0	104	0	0	0	0	2,488	2,555	782
Asphalt and Road Oil	0	3,511	0	-89	0	-449	0	0	(S)	2,973	4,316
Still Gas	0	7,488	0	0	0	0	0	0	0	7,488	0
Miscellaneous Products	35	893	0	-115	0	-42	0	0	3	768	929
Total	162,812	192,159	60,316	-10,727	-27,195	-79,013	9	186,172	7,352	104,818	742,232

<sup>1</sup> Unaccounted for crude oil is a balancing item.<sup>2</sup> Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(S) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 9. PAD District IV Supply and Disposition of Crude Oil and Petroleum Products, May 1983  
(Thousands of Barrels)

Commodity	Supply					Disposition					Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	E 17,593	0	1,085	1,314	-6,852	0	2	13,130	0	8	14,855
Natural Gas Liquids and LRGs	2,221	139	359	29	0	-885	0	469	0	1,394	1,128
Liquefied Petroleum Gases	816	139	278	-2	0	60	0	285	0	1,006	550
Other Products <sup>2</sup>	1,405	0	81	31	0	-945	0	184	0	388	578
Other Liquids	13	0	0	48	0	0	0	-567	0	628	5,291
Other Hydrocarbons and Alcohol	13	0	0	0	0	0	0	13	0	0	0
Unfinished Oils	0	0	0	-159	0	0	0	-598	0	439	3,173
Motor Gasoline Blending Components	0	0	0	207	0	0	0	18	0	189	2,118
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	6	13,310	57	-202	0	-294	0	0	3	12,874	13,691
Finished Motor Gasoline	4	6,706	33	299	0	-202	0	0	0	6,840	5,257
Finished Leaded Motor Gasoline	1	4,156	33	298	0	-286	0	0	0	4,202	3,333
Finished Unleaded Motor Gasoline	3	2,550	0	1	0	84	0	0	0	2,638	1,924
Finished Aviation Gasoline	0	29	0	15	0	0	0	0	0	44	52
Naphtha-Type Jet Fuel	0	479	0	-88	0	-178	0	0	0	213	347
Kerosene-Type Jet Fuel	0	648	0	-41	0	367	0	0	0	974	764
Kerosene	0	7	0	2	0	0	0	0	0	9	27
Distillate Fuel Oil	0	3,630	20	-198	0	-281	0	0	0	3,171	2,949
Residual Fuel Oil	0	296	3	-52	0	0	0	0	0	247	505
Naphtha and Other Oils for Petro. Feed	0	2	0	-2	0	0	0	0	1	-1	4
Special Naphthas	0	5	(S)	-4	0	0	0	0	(S)	1	14
Lubricants	0	30	(S)	-6	0	0	0	0	0	23	80
Waxes	0	10	0	1	0	0	0	0	0	11	4
Petroleum Coke	0	299	0	-55	0	0	0	0	(S)	244	937
Asphalt and Road Oil	0	697	0	-72	0	0	0	0	(S)	625	2,749
Still Gas	0	446	0	0	0	0	0	0	0	446	0
Miscellaneous Products	2	26	1	-1	0	0	0	0	(S)	27	2
Total	19,833	13,449	1,500	1,189	-6,852	-1,179	2	13,032	3	14,904	34,965

<sup>1</sup> Unaccounted for crude oil is a balancing item.

<sup>2</sup> Includes natural gasoline, isopentane, unrefractionated stream, and plant condensate.

(S) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.



# and Disposition of Crude Oil and Petroleum Products, May 1983

Commodity	Supply				Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
<b>Crude Oil (including lease condensate)</b> .....	E 87,903	0	7,385	2,574	431	-21,741	14	66,261	8,374	1,903	84,079
<b>Natural Gas Liquids and LRGs</b> .....	1,178	1,415	506	-414	0	0	0	709	156	1,819	1,960
Liquefied Petroleum Gases .....	611	1,415	506	-414	0	0	0	440	156	1,521	1,908
Other Products <sup>2</sup> .....	567	0	0	0	0	0	0	269	0	298	52
<b>Other Liquids</b> .....	384	0	562	-409	0	0	0	1,044	0	-507	32,364
Other Hydrocarbons and Alcohol .....	384	0	0	0	0	0	0	384	0	0	7
Unfinished Oils .....	0	0	123	617	0	0	0	1,154	0	-414	24,837
Motor Gasoline Blending Components .....	0	0	439	-1,000	0	0	0	-468	0	-93	7,460
Aviation Gasoline Blending Components .....	0	0	0	-26	0	0	0	-26	0	0	60
<b>Finished Petroleum Products</b> .....	0	69,970	2,292	-539	0	4,061	0	0	8,309	67,475	51,494
Finished Motor Gasoline .....	0	29,256	1,207	24	0	1,824	0	0	22	32,289	17,575
Finished Leaded Motor Gasoline .....	0	12,540	876	134	0	1,178	0	0	22	14,706	7,984
Finished Unleaded Motor Gasoline .....	0	16,716	331	-110	0	646	0	0	0	17,583	9,591
Finished Aviation Gasoline .....	0	185	0	25	0	0	0	0	0	210	543
Naphtha-Type Jet Fuel .....	0	1,598	0	-160	0	410	0	0	0	1,848	1,685
Kerosene-Type Jet Fuel .....	0	6,690	222	78	0	372	0	0	40	7,323	5,693
Kerosene .....	0	272	0	-115	0	0	0	0	(s)	157	384
Distillate Fuel Oil .....	0	10,676	64	-512	0	631	0	0	1,187	9,673	9,862
Residual Fuel Oil .....	0	11,220	733	496	0	629	0	0	3,843	9,235	8,534
Naphtha and Other Oils for Petro. Feed .....	0	848	0	67	0	0	0	0	120	795	573
Special Naphthas .....	0	129	17	-30	0	0	0	0	3	113	355
Lubricants .....	0	368	23	-80	0	176	0	0	49	438	1,372
Waxes .....	0	63	3	-12	0	0	0	0	4	50	82
Petroleum Coke .....	0	3,193	0	-51	0	0	0	0	3,023	119	2,344
Asphalt and Road Oil .....	0	1,866	12	-164	0	0	0	0	16	1,698	2,159
Still Gas .....	0	3,406	0	0	0	0	0	0	0	3,406	0
Miscellaneous Products .....	0	200	10	-105	0	19	0	0	3	121	333
<b>Total</b> .....	89,465	71,385	10,744	1,212	431	-17,680	14	68,014	16,839	70,590	169,897

1 Unaccounted for crude oil is a balancing item.

<sup>1</sup> Unaccounted for crude oil is a balancing item.

<sup>2</sup> Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.

(s) Less than 500 barrels.

E Estimated.

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

**Table 11. Production of Crude Oil (including Lease Condensate) by PAD District and State, for the Most Current Available Month,<sup>1</sup> March 1983  
(Thousands of Barrels)**

	Production	
	Total	Daily Average
PAD District I		
Florida .....	1,908	62
New York .....	E 71	2
Pennsylvania .....	E 364	12
Virginia .....	E 4	(s)
West Virginia .....	386	12
Adjustment 2 .....	-191	-6
Total PAD District I .....	E 2,542	82
PAD District II		
Illinois .....	2,561	83
Indiana .....	339	11
Kansas .....	6,084	196
Kentucky .....	725	23
Michigan .....	E 2,605	84
Missouri .....	E 17	1
Nebraska .....	542	17
North Dakota .....	4,419	143
Ohio .....	E 1,238	40
Oklahoma .....	13,747	443
South Dakota .....	97	3
Tennessee .....	102	3
PAD District III		
Alabama .....	1,603	52
Arkansas .....	E 1,601	52
Louisiana .....	E 36,580	1,180
Gulf Coast .....	2,929	94
Rest Of State .....	E 39,509	1,274
Total Louisiana .....	2,665	86
Mississippi .....		
New Mexico .....		
Northwestern .....	525	17
Southeastern .....	5,895	190
Total New Mexico .....	6,420	207
Texas .....		
TRRC District 01 .....	2,087	67
TRRC District 02 .....	3,402	110
TRRC District 03 .....	E 11,233	362
TRRC District 04 .....	2,315	75
TRRC District 05 .....	732	24
TRRC District 06, excluding East Texas .....	3,605	116
TRRC District 07B .....	4,444	143
TRRC District 07C .....	2,831	91
TRRC District 08 .....	2,944	95
TRRC District 08A .....	19,722	636
TRRC District 09 .....	19,099	616
TRRC District 10 .....	3,254	105
East Texas .....	1,775	57
Total Texas .....	E 77,443	2,498
Adjustment 2 .....	-1,127	-36
Total PAD District III .....	E 128,114	4,133
PAD District IV		
Colorado .....	2,407	78
Montana .....	2,451	79
Utah .....	E 1,992	64
Wyoming .....	E 9,936	321
Adjustment 2 .....	937	30
Total PAD District IV .....	E 17,723	572
PAD District V		
Alaska .....	2,152	69
South Alaska .....	51,549	1,663
North Slope .....	-188	-6
Adjustment for Alaska <sup>2</sup> .....	E 53,513	1,726
Total Alaska .....	24	1
Arizona .....		
California .....	6,373	206
Central Coastal .....	20,844	672
East Central .....	15	(s)
North .....	6,407	207
South .....	33,639	1,085
Total California .....	53	2
Nevada .....	1,330	43
Adjustment for Arizona, California, and Nevada <sup>2</sup> .....	E 88,559	2,857
Total PAD District V .....	E 268,989	8,677
United States Total .....		

<sup>1</sup> Includes the following offshore production (thousands of barrels):

Alaska: 1,881;  
California: Federal- 2,506, State- 3,180;  
Louisiana: Federal- E 24,127, State- 2,048;  
Texas: Federal- E 1,788, State- 148;  
U.S. Total- 35,678.

<sup>2</sup> These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PADD District and national levels will be published without adjustments in the Petroleum Supply Annual.

(s) Less than 500 barrels.

Sources: See Explanatory Notes on Data Collection and Estimation.

E = Estimated.

Table 12. Natural Gas Processing Plant Production of Petroleum Products by PAD District, May 1983  
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La. Ark.	New Mexico	Total		Rocky Mnt.	Dist. V West Coast
Natural Gas Liquids .....	300	165	465	3	1,966	442	6,616	9,027	19,115	2,829	6,864	585	3,386	32,779	2,221	1,178	45,670
Natural Gasoline and Isopentane .....	55	9	64	0	66	69	1,172	1,307	1,677	2,850	1,117	121	317	6,082	332	422	8,207
Unfractionated Stream .....	0	84	84	3	874	81	-2,074	-1,116	10,450	-11,850	-1,272	-14	2,014	-672	954	145	-605
Plant Condensate .....	0	0	0	0	38	26	52	116	214	-283	23	16	7	-23	119	0	212
Liquefied Petroleum Gases .....	245	72	317	0	988	266	7,466	8,720	6,774	12,112	6,996	462	1,048	27,392	816	611	37,856
Ethane .....	0	39	39	0	428	0	1,175	1,603	797	3,088	1,951	30	107	5,973	16	0	7,631
Propane .....	148	22	170	0	385	164	2,764	3,313	2,451	3,817	2,118	148	436	8,970	521	346	13,320
Butane .....	79	8	87	0	77	89	1,013	1,179	1,073	1,972	774	176	246	4,241	265	221	5,983
Butane-Propane Mixtures .....	0	0	0	0	0	0	9	9	55	41	1	13	0	110	8	32	159
Ethane-Propane Mixtures .....	0	0	0	0	48	0	2,093	2,141	2,193	2,028	1,446	95	181	5,848	0	0	7,989
Isobutane .....	18	3	21	0	50	13	412	475	205	1,166	706	95	78	2,250	6	12	2,764
Finished Petroleum Products .....	44	0	44	0	2	0	6	8	238	3	1	5	2	249	6	0	307
Finished Motor Gasoline .....	44	0	44	0	0	0	0	0	0	0	0	0	0	0	4	0	48
Finished Leaded Motor Gasoline .....	23	0	23	0	0	0	0	0	0	0	0	0	0	0	1	0	24
Finished Unleaded Motor Gasoline .....	21	0	21	0	0	0	0	0	0	0	0	0	0	0	3	0	24
Finished Aviation Gasoline .....	0	0	0	0	0	0	0	0	89	0	0	0	0	89	0	0	89
Naphtha-Type Jet Fuel .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil .....	0	0	0	0	0	0	0	0	2	0	0	1	2	5	0	0	5
Special Naphthas .....	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	2
Miscellaneous Products .....	0	0	0	0	0	0	0	0	118	0	0	0	0	118	0	0	118
<b>Total Production .....</b>	<b>344</b>	<b>165</b>	<b>509</b>	<b>3</b>	<b>1,968</b>	<b>442</b>	<b>6,622</b>	<b>9,035</b>	<b>19,353</b>	<b>2,832</b>	<b>6,865</b>	<b>590</b>	<b>3,388</b>	<b>33,028</b>	<b>2,227</b>	<b>1,178</b>	<b>45,977</b>
1 Production represents quantity of natural gas processing plant																	

<sup>1</sup> Production represents quantity of natural gas processing plant output less input to fractionating facilities.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, May 1983  
(Thousands of Barrels, except where noted)

Commodity	PAD District I			PAD District II						PAD District III				PAD District IV		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ill., Ky.	Ind., Wisc., Daks.	Minn., Okla., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mts.	West Coast
Crude Oil (including lease condensate) .....	30,507	2,837	33,344	1,645	52,271	6,821	21,561	82,299	14,081	90,042	58,350	5,452	2,489	170,414	13,130	66,261
Natural Gas Liquids .....																
Natural Gasoline and Isopentane .....	20	0	20	0	345	39	825	1,209	1,009	1,917	640	73	89	3,728	114	269
Unfractionated Stream .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plant Condensate .....	0	0	0	0	98	0	12	110	0	462	8	188	1	659	70	839
Liquefied Petroleum Gases .....	241	9	250	67	1,442	199	619	2,327	339	1,272	1,350	126	38	3,125	285	440
Ethane .....	0	0	0	0	0	0	0	0	0	6	83	0	0	89	1	0
Propane .....	0	0	0	0	43	1	0	44	0	2	48	0	0	50	7	26
Butane .....	0	9	9	18	1,018	171	286	1,493	82	1,139	939	19	0	2,179	171	296
Butane-Propane Mixtures .....	0	0	0	0	0	0	0	0	4	15	91	0	17	127	59	27
Ethane-Propane Mixtures .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isobutane .....	241	0	241	49	381	27	333	790	253	110	189	107	21	680	47	91
Other Liquids .....																
Other Hydrocarbons and Alcohol .....	75	0	75	0	1,074	0	0	1,074	0	295	153	0	0	448	13	384
Unfinished Oil (net) .....	3,777	7	3,784	17	214	-44	-547	-360	-23	3,305	1,046	213	184	4,705	-598	1,154
Motor Gasoline Blending Components (net) .....	180	-38	142	8	1,037	37	945	2,027	-560	1,506	2,157	-27	-4	3,072	18	-468
Aviation Gasoline Blending Components (net) .....	-25	0	-25	0	-73	0	-21	-94	-21	-9	51	0	0	21	0	-26
Total Input to Refineries .....	34,775	2,815	37,590	1,738	56,408	7,052	23,394	88,592	14,825	98,790	63,755	6,025	2,777	186,172	13,032	68,014
Crude Oil Distillation .....																
Gross Input (daily average) .....	1,010	92	1,102	53	1,732	227	708	2,720	466	2,975	1,897	185	81	5,604	435	2,199
Operable Capacity (daily average) .....	1,473	174	1,647	66	2,351	295	854	3,565	612	4,061	2,877	295	106	7,950	561	3,114
Operating Ratio (percent) <sup>1</sup> .....	68.6	52.5	66.9	80.4	73.7	76.9	83.0	76.3	76.1	73.3	65.9	62.9	77.0	70.5	77.6	70.6
Crude Oil Qualities .....																
Sulfur Content, Weighted Average (percent) .....	98	43	93	85	93	1.87	54	.91	.53	.90	.69	1.52	.77	.82	1.00	.98
API Gravity, Weighted Average .....	31.43	40.70	32.22	34.26	36.03	29.20	37.25	35.74	37.81	34.82	34.15	31.26	39.31	34.79	35.16	25.92
Operable Capacity (daily average) .....																
Operating .....	1,473	174	1,647	66	2,351	295	854	3,565	612	4,061	2,877	295	106	7,950	561	3,114
Idle .....	1,310	110	1,420	66	2,065	295	765	3,191	569	3,414	2,275	234	99	6,593	526	2,859
Total .....	163	64	227	0	286	0	89	375	42	647	601	61	6	1,357	35	255

<sup>1</sup> Represents gross input divided by operable capacity.  
Note: Total may not equal sum of components due to independent rounding.  
Source: See Explanatory Notes on Data Collection and Estimation.

Table 14. Refinery Production of Petroleum Products by PAD District, May 1983  
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La. Ark.	New Mexico	Total			
Liquefied Refinery Gases .....	1,448	27	1,475	32	1,755	216	526	2,529	129	2,658	1,477	87	104	4,483	139	1,415	10,041
For Petrochemical Feedstock Use .....	422	0	422	0	299	0	37	336	21	1,321	254	17	0	1,613	-8	351	2,714
For Other Uses .....	1,026	27	1,053	32	1,456	216	489	2,193	108	1,365	1,223	70	104	2,870	147	1,064	7,327
Ethane .....	0	0	0	0	0	0	0	0	0	412	7	0	0	419	0	-1	418
For Petrochemical Feedstock Use .....	0	0	0	0	0	0	0	0	0	271	0	0	0	271	0	0	271
For Other Uses .....	0	0	0	0	0	0	0	0	0	141	7	0	0	148	0	-1	147
Propane .....	1,193	27	1,220	32	1,596	203	583	2,414	180	2,204	1,341	60	60	3,845	166	817	8,462
For Petrochemical Feedstock Use .....	395	0	395	0	232	0	37	269	21	1,052	169	0	0	1,242	0	157	2,063
For Other Uses .....	798	27	825	32	1,364	203	546	2,145	159	1,152	1,172	60	60	2,603	166	660	6,399
Butane .....	255	0	255	0	90	13	-57	46	-51	-52	127	25	25	74	3	477	855
For Petrochemical Feedstock Use .....	27	0	27	0	0	0	0	0	0	1	85	17	0	103	0	194	324
For Other Uses .....	228	0	228	0	90	13	-57	46	-51	-53	42	8	25	-29	3	283	531
Butane-Propane Mixtures .....	0	0	0	0	2	0	0	2	0	125	2	2	19	148	-22	122	250
For Petrochemical Feedstock Use .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
For Other Uses .....	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Isobutane for Petro. Feed. Use .....	0	0	0	0	67	0	0	67	0	-3	0	0	0	-3	-8	0	56
Finished Motor Gasoline .....	17,803	1,167	18,970	989	35,689	4,129	13,798	54,615	7,940	46,223	31,189	1,883	1,124	88,359	6,706	29,256	197,906
Finished Leaded Motor Gasoline .....	6,538	555	7,093	478	15,889	2,329	8,604	27,300	4,093	19,840	14,330	869	631	39,763	4,156	12,540	90,852
Finished Unleaded Motor Gasoline .....	11,265	612	11,877	511	19,810	1,800	5,194	27,315	3,847	26,383	16,859	1,014	493	48,596	2,550	16,716	107,054
Finished Aviation Gasoline .....	0	0	0	0	34	0	30	64	7	230	109	0	0	346	29	185	624
Naphtha-Type Jet Fuel .....	692	47	739	46	417	94	366	923	679	1,334	451	241	564	3,269	479	1,598	7,008
Kerosene-Type Jet Fuel .....	876	0	876	68	2,897	309	752	4,026	731	5,705	5,442	3	26	11,907	648	6,890	24,147
Kerosene .....	90	22	112	0	7	6	-45	-32	15	1,085	1,179	4	17	2,300	7	272	2,959
Distillate Fuel Oil .....	7,210	712	7,922	388	8,710	1,361	5,419	15,878	3,231	20,378	11,616	1,677	757	37,659	3,630	10,676	75,765
Residual Fuel Oil .....	2,635	171	2,806	53	1,454	223	322	2,052	583	7,765	3,760	269	85	12,462	296	11,220	28,836
Naphtha < 400 Deg. For Petro. Feed. Use .....	364	0	364	0	276	0	93	369	472	2,983	334	29	0	3,818	0	171	4,722
Other Oils > 400 Deg. For Petro. Feed. Use .....	9	0	9	0	185	0	1	186	70	2,870	3,744	13	0	6,697	2	677	7,571
Special Naphthas .....	14	30	44	0	218	0	208	426	27	875	28	150	0	1,080	5	129	1,884
Lubricants .....	283	339	622	0	486	0	297	783	14	1,620	747	321	0	2,702	30	368	4,505
Waxes .....	27	69	96	0	14	0	28	42	7	117	73	49	0	246	10	63	457
Petroleum Coke .....	1,095	19	1,114	25	2,065	634	784	3,508	275	2,534	1,879	139	12	4,939	299	3,193	13,053
Marketable .....	316	0	316	0	1,110	539	583	2,232	61	1,176	1,152	107	0	2,496	159	2,507	7,710
Catalyst .....	779	19	798	25	955	95	201	1,276	214	1,458	727	32	12	2,443	140	886	5,343
Asphalt and Road Oil .....	2,522	45	2,567	123	2,254	687	616	3,680	544	629	1,297	952	89	3,511	697	1,866	12,321
Still Gas .....	1,564	99	1,663	59	2,438	258	810	3,565	416	4,623	2,183	212	54	7,488	446	3,406	16,568
For Petrochemical Feedstock Use .....	211	0	211	0	2	32	0	34	3	292	7	0	0	302	15	0	562
For Other Uses .....	1,353	99	1,452	59	2,436	226	810	3,531	413	4,331	2,176	212	54	7,186	431	3,406	16,006
Miscellaneous Products .....	174	42	216	3	73	26	55	157	48	535	257	53	0	893	26	200	1,492
Fuel Use .....	10	17	27	0	1	0	13	14	0	29	222	0	0	251	3	36	331
Non-Fuel Use .....	164	25	189	3	72	26	42	143	48	506	35	53	0	642	23	164	1,161
Total Production .....	36,806	2,789	39,595	1,786	58,982	7,943	24,060	92,771	15,188	102,292	65,765	6,082	2,832	192,159	13,449	71,385	409,359
Processing Gain(-) or Loss(+) <sup>1</sup> .....	-2,031	26	-2,005	-48	-2,574	-891	-666	-4,179	-363	-3,502	-2,010	-57	-55	-5,987	-417	-3,371	-15,959

<sup>1</sup> Represents the arithmetic difference between input and output.

Note: See Explanatory Note on negative production.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 15. Percent Refinery Yield of Petroleum Products by PAD District,<sup>1</sup> May 1983

Commodity	PAD District I				PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		Rocky Mt.	Dist. V West Coast
Finished Motor Gasoline <sup>2</sup> .....	50.4	42.1	49.8	55.0	60.4	56.9	54.2	58.4	50.9	43.7	45.3	26.9	37.7	44.2	49.5	42.5	47.7
Finished Aviation Gasoline <sup>3</sup> .....	.1	.0	.1	.0	.2	.0	.2	.2	.2	.3	.1	.0	.0	.2	.2	.3	.2
Liquefied Refinery Gases .....	4.2	.9	4.0	1.9	3.3	3.2	2.5	3.1	.9	2.9	2.5	1.5	3.9	2.6	1.1	2.1	2.7
Naphtha-Type Jet Fuel .....	2.0	1.7	2.0	2.8	.8	1.4	1.7	1.1	4.8	1.4	.8	4.3	21.3	1.9	3.8	2.4	1.9
Kerosene-Type Jet Fuel .....	2.6	0	2.4	4.1	5.5	4.6	3.6	4.9	5.2	6.1	9.2	.1	1.0	6.8	5.2	9.9	6.5
Kerosene .....	.3	.8	.3	0	.0	.1	-.2	.0	.1	1.2	2.0	.1	.6	1.3	.1	.4	.7
Distillate Fuel Oil .....	21.0	25.0	21.3	23.3	16.6	20.1	25.8	19.4	23.0	21.8	19.6	29.6	28.5	21.5	29.0	15.8	20.3
Residual Fuel Oil .....	7.7	6.0	7.6	3.2	2.8	3.3	1.5	2.5	4.1	8.3	6.3	4.7	3.2	7.1	2.4	16.6	7.7
Naphtha < 400 Deg. F. Petro. Feed. Use .....	1.1	0	1.0	0	.5	0	.4	.5	3.4	3.2	.6	.5	0	2.2	0	.3	1.3
Other Oils > 400 Deg. F. Petro. Feed. Use .....	.0	0	.0	0	.4	0	.0	.5	.2	.9	.0	2.6	0	.6	.0	1.0	.5
Special Naphthas .....	.0	1.1	1.1	0	.4	0	1.0	.5	.2	1.7	1.3	5.7	0	1.5	.2	.5	1.2
Lubricants .....	.8	11.9	1.7	0	.9	0	1.4	1.0	.1	1.7	.1	.9	0	.1	.1	.1	.1
Waxes .....	.1	2.4	.3	0	.0	0	.1	.1	.0	.1	.1	.1	.5	.1	.1	.1	.1
Petroleum Coke .....	3.2	.7	3.0	1.5	3.9	9.4	3.7	4.3	2.0	2.8	3.2	2.5	.5	2.8	2.4	4.7	3.5
Asphalt and Road Oil .....	7.4	1.6	6.9	7.4	4.3	10.1	2.9	4.5	3.9	.7	2.2	16.8	3.4	2.0	5.6	2.8	3.3
Still Gas .....	4.6	3.5	4.5	3.5	4.6	3.8	3.9	4.4	3.0	5.0	3.7	3.7	2.0	4.3	3.6	5.1	4.4
Miscellaneous Products .....	.5	1.5	.6	.2	.1	.4	.3	.2	.3	.6	.4	.9	0	.5	.2	.3	.4
Processing Gain(-) or Loss(+) <sup>4</sup> .....	-5.9	.9	-5.4	-2.9	-4.9	-13.1	-3.2	-5.1	-2.6	-3.8	-3.4	-1.0	-2.1	-3.4	-3.3	-5.0	-4.3

<sup>1</sup> Based on crude oil input and net returns of unfinished oils.<sup>2</sup> Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.<sup>3</sup> Based on finished aviation gasoline output plus net output of aviation gasoline blending components.<sup>4</sup> Represents the difference between input and production.

Note: Totals may not equal sum of components due to independent rounding.

Note: See Explanatory Note on negative production.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 16. Imports of Crude Oil and Petroleum Products by PAD District, May 1983  
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) <sup>1 2</sup>	25,334	14,000	52,448	1,085	7,385	100,252
Natural Gas Liquids	403	3,711	790	359	506	5,769
Natural Gasoline and Isopentane	0	0	0	0	0	0
Plant Condensate	93	0	430	81	0	603
Liquefied Petroleum Gases	310	3,711	361	278	506	5,166
Ethane	(s)	1,118	0	0	0	1,118
Propane	264	670	0	141	247	1,323
Butane	46	558	0	137	258	999
Butane-Propane Mixtures	0	1	361	0	0	362
Ethane-Propane Mixtures	0	1,363	0	0	0	1,363
Other Liquids <sup>1</sup>	3,128	641	3,839	0	562	8,171
Unfinished Oils <sup>1</sup>	3,128	548	3,605	0	123	7,404
Motor Gasoline Blending Components	0	94	234	0	439	767
Aviation Gasoline Blending Components	0	0	0	0	0	0
Finished Petroleum Products	30,994	1,054	3,238	57	2,292	37,635
Finished Motor Gasoline	7,323	232	0	33	1,207	8,796
Finished Leaded Motor Gasoline	4,605	187	0	33	876	5,700
Finished Unleaded Motor Gasoline	2,718	46	0	0	331	3,095
Finished Aviation Gasoline	(s)	0	0	0	0	(s)
Naphtha-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	840	0	28	0	222	1,090
Bonded Aircraft Fuel	0	0	0	0	0	0
Other	840	0	28	0	222	1,090
Kerosene	136	0	0	0	0	137
Distillate Fuel Oil	3,612	181	490	20	64	4,367
Bonded Ships Bunkers	0	0	0	0	0	0
Other	3,612	181	490	20	64	4,367
Residual Fuel Oil	18,638	500	2,101	3	733	21,975
Bonded Ships Bunkers	0	0	0	0	0	0
Other	18,638	500	2,101	3	733	21,975
Naphtha < 400 Deg. for Petro. Feed. Use	13	54	228	0	0	295
Other Oils > 400 Deg. for Petro. Feed. Use	0	0	0	0	0	0
Special Naphthas	106	58	388	(s)	17	570
Lubricants	95	7	(s)	(s)	23	125
Waxes	4	3	1	0	3	11
Asphalt and Road Oil	225	12	0	0	12	248
Miscellaneous Products	2	7	0	1	10	20
Total Imports	59,859	19,407	60,316	1,500	10,744	151,826

<sup>1</sup> Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.

<sup>2</sup> Includes crude oil imported for storage in the Strategic Petroleum Reserve.  
(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.  
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, May 1983  
(Thousands of Barrels)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
All PAD Districts														
<b>Arab OPEC</b>														
Algeria	6,234	0	82	0	0	0	0	0	1,853	0	649	2,585	8,818	284
Saudi Arabia	3,426	0	353	0	0	0	0	0	0	0	0	353	3,779	122
United Arab Emirates	0	0	144	234	0	0	0	0	0	0	0	378	378	12
Subtotal Arab OPEC	9,660	0	579	234	0	0	0	0	1,853	0	649	3,316	12,976	419
<b>Other OPEC</b>														
Ecuador	646	0	0	0	0	0	0	0	0	0	0	0	646	21
Gabon	1,488	0	0	0	0	0	0	0	0	0	0	0	1,488	48
Indonesia	9,048	0	0	0	133	0	2	2	870	0	0	1,006	10,054	324
Iran	1,161	0	0	0	0	0	0	0	0	0	0	0	1,161	37
Nigeria	10,916	0	0	0	0	0	0	0	0	0	0	0	10,916	352
Venezuela	4,582	0	574	0	540	0	135	1,035	6,847	0	52	9,182	13,764	444
Subtotal Other OPEC	27,841	0	574	0	673	0	135	1,037	7,716	0	52	10,189	38,030	1,227
<b>Other</b>														
Angola	2,164	0	0	0	0	0	0	0	332	0	0	332	2,496	81
Australia	0	0	0	0	0	0	0	0	251	0	0	251	251	8
Bahamas	0	0	2,263	0	0	533	0	480	890	32	0	4,198	4,198	135
Brazil	0	0	0	0	1,000	0	0	0	1,075	0	0	2,074	2,074	67
Canada	6,969	4,804	260	94	1,199	0	32	720	1,032	86	319	8,547	15,517	501
Congo	0	0	0	0	0	0	0	0	177	0	0	177	177	6
Egypt	501	0	21	0	0	0	0	0	0	0	0	21	522	17
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico	28,228	361	0	0	1,538	0	28	19	597	2	16	1,024	29,252	944
Netherlands	0	0	0	0	0	0	0	0	0	36	1	1,574	1,574	51
Norway	2,219	0	0	0	621	0	0	0	3,362	0	198	4,753	4,753	153
People's Republic of China	0	0	119	439	0	0	0	0	0	0	0	0	2,219	72
Peru	785	0	210	0	233	0	0	0	262	0	0	1,179	1,179	38
Puerto Rico	0	0	372	0	540	0	0	494	0	151	58	1,308	1,308	42
Romania	0	0	0	0	0	0	0	0	0	0	0	540	540	17
Spain	0	0	0	0	0	0	0	0	0	154	0	154	154	5
Trinidad and Tobago	2,772	0	0	0	0	0	0	0	587	0	0	587	3,359	108
United Kingdom	14,703	1	0	0	207	0	0	0	0	57	1	266	14,969	483
Virgin Islands	0	0	2,037	0	1,438	158	0	1,111	2,533	0	0	7,276	7,276	235
Zaire	233	0	0	0	0	0	0	0	0	0	0	0	233	8
Other Western Hemisphere	146	0	0	0	0	0	0	0	811	0	0	811	957	31
Other Eastern Hemisphere	4,031	(s)	0	0	1,348	337	0	283	497	53	9	2,526	6,557	212
Subtotal Other	62,751	5,166	6,251	533	8,123	1,088	2	3,330	12,406	570	602	38,070	100,821	3,252
<b>Total Imports</b>	<b>100,252</b>	<b>5,166</b>	<b>7,404</b>	<b>767</b>	<b>8,796</b>	<b>1,090</b>	<b>137</b>	<b>4,367</b>	<b>21,975</b>	<b>570</b>	<b>1,303</b>	<b>51,574</b>	<b>151,826</b>	<b>4,898</b>

See footnotes at end of table.



Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, May 1983  
(Thousands of Barrels)  
(continued)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District I														
<b>Arab OPEC</b>														
Algeria .....	1,492	0	0	0	0	0	0	0	1,486	0	0	1,486	2,978	96
Saudi Arabia .....	1,151	0	353	0	0	0	0	0	0	0	0	353	1,504	49
Subtotal Arab OPEC .....	2,643	0	353	0	0	0	0	0	1,486	0	0	1,839	4,482	145
<b>Other OPEC</b>														
Gabon .....	1,374	0	0	0	0	0	0	0	0	0	0	0	1,374	44
Indonesia .....	2,798	0	0	0	0	0	0	0	0	0	0	0	2,798	90
Iran .....	530	0	0	0	0	0	0	0	0	0	0	0	530	17
Nigeria .....	3,291	0	0	0	0	0	0	0	0	0	0	0	3,291	106
Venezuela .....	3,024	0	0	0	540	0	135	1,035	6,458	0	52	8,219	11,242	363
Subtotal Other OPEC .....	11,018	0	0	0	540	0	135	1,035	6,458	0	52	8,219	19,236	621
<b>Other</b>														
Angola .....	1,106	0	0	0	0	0	0	0	332	0	0	332	1,437	46
Australia .....	0	0	0	0	0	0	0	0	251	0	0	251	251	8
Bahamas .....	0	0	420	0	0	424	0	245	890	32	0	2,011	2,011	65
Brazil .....	0	0	0	1,000	0	0	0	0	1,075	0	0	2,074	2,074	67
Canada .....	2	310	0	679	0	8	1	520	529	10	146	2,203	2,205	71
Congo .....	0	0	0	0	0	0	0	0	177	0	0	177	177	6
Egypt .....	501	0	21	0	0	0	0	0	0	0	0	21	522	17
France .....	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico .....	2,396	0	0	0	0	0	0	0	297	0	0	297	2,693	87
Netherlands .....	0	0	0	1,538	0	0	0	0	0	0	1	1,538	1,538	50
Netherlands Antilles .....	0	0	500	0	0	0	0	224	3,168	0	175	4,066	4,066	131
Norway .....	2,219	0	0	0	0	0	0	0	0	0	0	0	2,219	72
Peru .....	367	0	0	0	0	0	0	0	262	0	0	262	629	20
Puerto Rico .....	0	0	372	0	233	0	0	494	0	57	58	1,214	1,214	39
Romania .....	0	0	0	0	540	0	0	0	0	0	0	540	540	17
Trinidad and Tobago .....	446	0	0	0	0	0	0	0	587	0	0	587	1,033	33
United Kingdom .....	3,085	0	0	0	207	0	0	0	0	0	1	207	3,293	106
Virgin Islands .....	0	0	1,462	0	1,436	158	0	862	2,533	0	0	6,453	6,453	208
Other Western Hemisphere .....	0	0	0	0	0	0	0	0	595	0	0	595	595	19
Other Eastern Hemisphere .....	1,551	(s)	0	0	1,150	249	0	233	0	8	(s)	1,639	3,190	103
Subtotal Other .....	11,673	310	2,775	0	6,783	840	1	2,578	10,695	106	380	24,468	36,141	1,166
<b>Total Imports</b> .....	<b>25,334</b>	<b>310</b>	<b>3,128</b>	<b>0</b>	<b>7,323</b>	<b>840</b>	<b>136</b>	<b>3,612</b>	<b>18,638</b>	<b>106</b>	<b>432</b>	<b>34,525</b>	<b>59,859</b>	<b>1,931</b>
PAD District II														
<b>Arab OPEC</b>														
Algeria .....	770	0	0	0	0	0	0	0	0	0	0	0	770	25
Saudi Arabia .....	564	0	0	0	0	0	0	0	0	0	0	0	564	18
Subtotal Arab OPEC .....	1,334	0	0	0	0	0	0	0	0	0	0	0	1,334	43

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, May 1983  
(Thousands of Barrels)

Table 17. Imports of Crude Oil and Petroleum Products (Thousands of Barrels)														
(continued)														
Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid. Fuel Oil	Special Naphtnas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District II														
Other OPEC														
Iran	631		0	0	0	0	0	0	0	0	0	0	631	20
Nigeria	1,045		0	0	0	0	0	0	0	0	0	0	1,045	34
Venezuela	0		292	0	0	0	0	0	0	0	0	292	292	9
Subtotal Other OPEC	1,676		292	0	0	0	0	0	0	0	0	292	1,968	63
Other														
Canada	5,734	3,711	256	94	232	0	0	181	500	58	83	5,114	10,848	350
France	0		0	0	0	0	0	0	0	0	0	0	0	(s)
Mexico	4,277		0	0	0	0	0	0	0	0	0	0	4,277	138
Trinidad and Tobago	419		0	0	0	0	0	0	0	0	0	0	419	14
United Kingdom	415	1	0	0	0	0	0	0	0	0	(s)	1	416	13
Other Western Hemisphere	146		0	0	0	0	0	0	0	0	0	0	146	5
Subtotal Other	10,990	3,711	256	94	232	0	0	181	500	58	83	5,115	16,105	520
Total Imports	14,000	3,711	548	94	232	0	0	181	500	58	83	5,407	19,407	626
PAD District III														
Arab OPEC														
Algeria	3,972		0	0	0	0	0	0	368	0	649	1,099	5,071	164
Saudi Arabia	1,711		0	0	0	0	0	0	0	0	0	0	1,711	55
United Arab Emirates	0		144	234	0	0	0	0	0	0	0	378	378	12
Subtotal Arab OPEC	5,683		226	234	0	0	0	0	368	0	649	1,477	7,160	231
Other OPEC														
Ecuador	310		0	0	0	0	0	0	0	0	0	0	310	10
Gabon	113		0	0	0	0	0	0	0	0	0	0	113	4
Indonesia	0		0	0	0	0	0	0	828	0	0	828	828	27
Nigeria	6,580		0	0	0	0	0	0	0	0	0	0	6,580	212
Venezuela	1,325		0	0	0	0	0	0	389	0	0	671	1,996	64
Subtotal Other OPEC	8,328		282	0	0	0	0	0	1,217	0	0	1,499	9,827	317
Other														
Angola	1,058		0	0	0	0	0	0	0	0	0	0	1,058	34
Bahamas	0		0	0	0	0	0	0	0	0	0	0	2,078	67
Mexico	21,554	361	1,843	(s)	0	0	28	235	300	36	1	700	22,254	718
Netherlands	0		0	0	0	0	0	0	0	0	(s)	36	36	1
Netherlands Antilles	0		0	0	0	0	0	0	0	0	0	471	471	15
Peru	0		0	0	0	0	0	0	0	0	0	210	210	7
Puerto Rico	0		0	0	0	0	0	0	0	0	0	94	94	3
Spain	0		0	0	0	0	0	0	0	0	0	154	154	5
Trinidad and Tobago	1,907		0	0	0	0	0	0	0	0	0	0	1,907	62
United Kingdom	11,204		0	0	0	0	0	0	0	0	0	57	11,261	363
Virgin Islands	0		0	0	0	0	0	0	0	0	0	823	823	27
Zaire	233		0	0	0	0	0	0	0	0	0	0	233	8
Other Western Hemisphere	0		0	0	0	0	0	0	216	0	0	0	216	7
Hamishhere	0		0	0	0	0	0	0	0	0	0	0	0	0

See footnotes at end of table.

Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, May 1983  
(Thousands of Barrels)  
(continued)

Source	Crude Oil 1	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distill. Fuel Oil	Resid. Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
PAD District III														
Other														
Other Eastern Hemisphere	2,481	0	0	0	0	0	0	0	0	45	8	53	2,534	82
Subtotal Other	38,437	361	3,097	(s)	0	28	1	490	516	388	10	4,891	43,328	1,398
Total Imports	52,448	361	3,605	234	0	28	1	490	2,101	388	659	7,867	60,316	1,946
PAD District IV														
Other														
Canada	1,085	278	0	0	33	0	0	20	3	(s)	81	415	1,500	48
Other Eastern Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Other	1,085	278	0	0	33	0	0	20	3	(s)	81	415	1,500	48
Total Imports	1,085	278	0	0	33	0	0	20	3	(s)	81	415	1,500	48
PAD District V														
Other OPEC														
Ecuador	336	0	0	0	0	0	0	0	0	0	0	0	336	11
Indonesia	6,250	0	0	0	133	2	0	2	42	0	0	179	6,428	207
Venezuela	234	0	0	0	0	0	0	0	0	0	0	0	234	8
Subtotal Other OPEC	6,819	0	0	0	133	2	0	2	42	0	0	179	6,998	226
Other														
Bahamas	0	0	0	0	0	108	0	0	0	0	0	108	108	3
Canada	148	506	4	0	255	24	0	0	0	17	9	815	964	31
Mexico	0	0	0	0	0	0	0	12	1	0	15	28	28	1
Netherlands Antilles	0	0	0	0	0	0	0	0	194	0	23	217	217	7
People's Republic of China	0	0	119	439	621	0	0	0	0	0	0	1,179	1,179	38
Peru	418	0	0	0	0	0	0	0	0	0	0	0	418	13
Other Eastern Hemisphere	0	(s)	0	0	198	88	0	50	497	0	(s)	834	834	27
Subtotal Other	566	506	123	439	1,075	220	0	62	692	17	47	3,180	3,746	121
Total Imports	7,385	506	123	439	1,208	222	0	64	733	17	47	3,359	10,744	347

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve.

2 Includes aviation gasoline, waxes, asphalt, lubricants, natural gasoline, isopentane, plant condensate, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Totals may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

**Table 18. Exports of Crude Oil and Petroleum Products by PAD District, May 1983**  
(Thousands of Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) <sup>1</sup>	4	310	0	0	8,374	8,688
Liquefied Petroleum Gases	128	597	1,734	0	156	2,616
Ethane	(s)	0	0	0	0	(s)
Propane	39	241	1,316	0	62	1,718
Butane	29	356	419	0	94	897
Butane-Propane Mixtures	0	0	0	0	0	0
Finished Motor Gasoline	1	21	(s)	0	22	44
Naphtha-Type Jet Fuel	(s)	0	0	0	0	(s)
Kerosene-Type Jet Fuel	2	0	0	0	40	40
Kerosene	2	(s)	0	0	(s)	2
Distillate Fuel Oil	2	1	369	0	1,187	1,559
Residual Fuel Oil	(s)	0	2,040	0	3,843	5,883
Naphtha < 400 Deg. for Petrochem. Feedstock	41	5	45	1	95	186
Other Oils > 400 Deg. for Petrochem. Feedstock	60	28	324	0	25	437
Special Naphthas	4	1	24	(s)	3	32
Lubricants	82	13	314	1	49	458
Waxes	4	1	10	0	4	19
Petroleum Coke	220	528	2,488	(s)	3,023	6,260
Asphalt	36	1	(s)	(s)	16	54
Miscellaneous Products	11	2	3	(s)	3	20
Total Product Exports	591	1,198	7,352	3	8,465	17,609
Total Exports	595	1,508	7,352	3	16,839	26,297

<sup>1</sup> Exports of crude oil are prohibited by law. However, some crude oil is exchanged with that of Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, May 1983  
(Thousands of Barrels)

Destination	Crude Oil	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubri-cants	Waxes	Petro-leum Coke	Asphalt	Other	Total	Total (Daily Average)
Argentina	0	1	0	0	0	0	(s)	6	1	0	0	2	10	(s)
Australia	0	1	0	0	0	0	(s)	10	(s)	0	(s)	4	14	(s)
Bahamas	0	5	1	(s)	1	145	0	2	0	0	0	1	154	5
Bahrain	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Belgium & Luxembourg	0	0	0	0	0	335	(s)	1	(s)	515	0	(s)	852	27
Brazil	0	0	0	0	0	0	(s)	(s)	(s)	0	0	(s)	1	(s)
Cameroon	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Canada	314	600	38	0	1	286	3	47	3	693	41	51	2,078	67
Chile	0	0	0	0	0	0	2	4	(s)	0	0	1	7	(s)
China (Taiwan)	0	88	0	0	0	129	(s)	9	(s)	97	11	1	334	11
Colombia	(s)	13	0	0	0	0	(s)	2	(s)	(s)	0	(s)	2	(s)
Costa Rica	0	0	0	0	0	0	(s)	6	0	0	0	1	21	1
Denmark	0	0	0	0	0	0	0	(s)	(s)	0	0	(s)	(s)	(s)
Dominican Republic	0	30	0	0	0	0	2	(s)	(s)	0	0	(s)	33	1
Ecuador	0	111	0	0	0	0	(s)	(s)	(s)	0	(s)	1	113	4
Egypt	0	0	0	0	0	0	0	1	0	0	0	1	2	(s)
El Salvador	0	1	0	0	0	0	2	9	(s)	0	0	1	12	(s)
Finland	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
France	0	67	0	0	0	0	0	1	1	23	0	4	96	3
French Pacific Isl	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ghana	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greece	0	2	0	0	0	0	0	0	(s)	0	0	0	3	(s)
Guatemala	0	54	0	0	0	0	(s)	2	1	0	0	(s)	57	2
Guinea	0	(s)	0	0	0	0	(s)	1	0	0	0	0	0	(s)
Honduras	0	1	0	0	0	0	(s)	1	(s)	0	0	(s)	2	(s)
Hong Kong	0	1	0	0	0	530	(s)	1	(s)	0	(s)	(s)	532	17
India	0	0	0	0	0	0	0	22	(s)	0	0	(s)	30	1
Indonesia	0	(s)	0	0	0	0	(s)	8	(s)	0	0	(s)	(s)	(s)
Iran	0	0	0	0	0	0	0	(s)	(s)	0	0	(s)	(s)	(s)
Israel	0	0	0	0	(s)	0	(s)	(s)	(s)	0	0	(s)	(s)	(s)
Italy	0	312	0	0	0	465	(s)	1	(s)	422	(s)	1	1,202	39
Ivory Coast	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jamaica	0	6	0	0	0	0	(s)	9	3	0	0	(s)	15	(s)
Japan	0	530	0	0	140	524	9	5	3	2,230	(s)	27	3,468	112
Jordan	0	0	0	0	0	0	0	1	0	0	0	0	1	(s)
Korea, Republic of	0	1	0	0	419	148	1	2	(s)	48	0	2	620	20
Kuwait	0	0	0	0	0	0	0	1	0	(s)	0	1	3	(s)
Lebanon	0	0	0	0	0	0	0	2	0	0	0	(s)	2	(s)
Liberia	0	(s)	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)
Malaysia	0	0	0	0	0	0	0	(s)	(s)	0	0	88	88	3
Mexico	0	452	5	40	(s)	(s)	2	157	1	32	0	5	696	22
Netherlands	0	101	0	0	236	355	5	39	(s)	698	0	49	1,483	48
Netherlands Antilles	0	0	0	0	195	609	(s)	(s)	(s)	0	(s)	(s)	804	26
New Zealand	0	0	0	0	0	0	2	3	(s)	42	(s)	0	48	2
Nicaragua	0	(s)	0	0	0	0	0	2	0	0	0	0	2	(s)
Nigeria	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Norway	0	0	0	0	0	0	0	1	(s)	0	0	1	1	(s)
Pacific Trust Terr.	0	0	0	0	0	0	0	(s)	0	0	1	0	1	(s)
Panama	0	12	0	0	0	200	1	15	(s)	0	0	1	229	7
Peru	0	17	0	0	0	0	0	1	(s)	0	0	(s)	19	1
Philippines	0	0	0	0	0	0	0	4	(s)	(s)	0	1	6	(s)
Puerto Rico	572	21	(s)	0	0	(s)	(s)	14	1	0	0	8	617	20
Rep. of South Africa	0	(s)	0	0	0	0	0	15	5	0	(s)	176	196	6

See footnotes at end of table.

Table 19. Exports of Crude Oil and Petroleum Products by Destination, May 1983  
(Thousands of Barrels)  
(continued)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt	Other	Total	Total (Daily Average)
Saudi Arabia	0	(s)	0	0	0	1,779	0	5	0	0	0	3	9	58
Singapore	0	2	0	0	0	(s)	0	2	(s)	868	0	1	1,784	29
Spain	0	(s)	0	0	0	0	0	(s)	0	16	0	22	890	1
Surinam	0	1	0	0	0	0	0	(s)	0	276	(s)	(s)	278	9
Sweden	0	0	0	0	0	0	0	1	(s)	0	0	1	11	(s)
Switzerland	0	10	0	0	0	0	0	1	(s)	0	0	23	140	5
Thailand	0	101	0	0	0	0	0	16	(s)	0	0	0	21	1
Trinidad and Tobago	0	20	0	0	0	0	0	(s)	0	1	0	90	91	3
Turkey	0	0	0	0	0	0	0	1	(s)	0	0	(s)	59	2
United Arab Emirates	0	(s)	0	0	0	0	0	2	(s)	58	0	3	329	11
United Kingdom	0	40	0	0	247	0	0	2	(s)	36	0	0	2	0
U.S.S.R.	0	0	0	0	0	0	0	0	0	0	0	(s)	1	(s)
Uruguay	0	0	0	0	0	0	0	1	(s)	0	0	(s)	1	244
Venezuela	0	(s)	0	0	0	309	0	(s)	0	0	0	(s)	7,578	8
Virgin Islands	7,269	0	0	0	0	0	0	3	1	172	0	62	240	240
West Germany	0	2	0	0	(s)	0	0	0	0	32	0	0	32	1
Yugoslavia	0	0	0	0	0	70	0	0	0	0	0	0	954	31
Other	533	12	0	0	319	0	(s)	17	(s)	0	(s)	1	26,297	848
Total	8,688	2,616	44	40	1,559	5,883	32	458	19	6,260	54	645	26,297	848

1 Exports of crude oil are prohibited by law. However, some crude oil is exchanged with that of Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, May 1983  
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total		PAD Dist. V	
																Rocky Mt.	West Coast
<b>Crude Oil (incl. lease condensate)</b>																	
Refinery .....	—	—	15,176	—	—	—	—	14,068	—	—	—	—	—	50,770	2,543	26,221	108,778
Tank Farms and Pipelines .....	—	—	979	—	—	—	—	66,283	—	—	—	—	—	89,395	10,894	30,475	198,026
Leases .....	—	—	62	—	—	—	—	1,705	—	—	—	—	—	17,232	1,418	1,856	22,273
Strategic Petroleum Reserve <sup>1</sup> .....	—	—	0	—	—	—	—	0	—	—	—	—	—	326,833	0	0	326,833
Alaskan In-Transit .....	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	25,527	25,527
Total .....	—	—	16,217	—	—	—	—	82,056	—	—	—	—	—	484,230	14,855	84,079	681,437
<b>Total Stocks, All Oils (excl. Crude Oil)</b>																	
Refinery .....	37,555	3,127	40,682	1,033	40,557	6,269	18,476	66,335	9,581	79,473	43,349	4,620	1,421	138,444	14,657	61,378	321,496
Bulk Terminal .....	—	—	98,290	—	—	—	—	82,943	—	—	—	—	—	78,153	2,490	20,770	282,646
Pipeline .....	—	—	28,998	—	—	—	—	32,827	—	—	—	—	—	37,563	2,733	3,587	105,708
Natural Gas Processing Plant .....	117	53	170	0	216	53	1,228	1,497	1,879	943	736	80	204	3,842	230	83	5,822
Total .....	—	—	168,140	—	—	—	—	183,602	—	—	—	—	—	258,002	20,110	85,818	715,672
<b>Natural Gasoline and Isopentane</b>																	
Refinery .....	17	0	17	0	6	22	96	124	86	404	173	1	10	674	7	23	845
Bulk Terminal .....	—	—	13	—	—	—	—	1,169	—	—	—	—	—	1,682	0	0	2,864
Pipeline .....	—	—	0	—	—	—	—	378	—	—	—	—	—	908	15	5	1,306
Natural Gas Processing Plant .....	4	10	14	0	13	12	124	149	309	188	164	19	20	700	41	23	927
Total .....	—	—	44	—	—	—	—	1,820	—	—	—	—	—	3,964	63	51	5,942
<b>Unfractionated Stream</b>																	
Refinery .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bulk Terminal .....	—	—	0	—	—	—	—	1,391	—	—	—	—	—	1,417	0	0	2,808
Pipeline .....	—	—	0	—	—	—	—	62	—	—	—	—	—	2,284	466	0	2,812
Natural Gas Processing Plant .....	0	3	3	0	102	1	568	671	188	572	86	2	10	858	31	1	1,564
Total .....	—	—	3	—	—	—	—	2,124	—	—	—	—	—	4,559	497	1	7,184
<b>Plant Condensate</b>																	
Refinery .....	0	0	0	0	6	0	2	8	8	84	0	48	0	140	0	0	148
Bulk Terminal .....	—	—	0	—	—	—	—	0	—	—	—	—	—	1	0	0	1
Pipeline .....	—	—	0	—	—	—	—	0	—	—	—	—	—	166	0	0	166
Natural Gas Processing Plant .....	0	0	0	0	1	.4	3	8	29	24	5	5	0	63	18	0	89
Total .....	—	—	0	—	—	—	—	16	—	—	—	—	—	370	18	0	404
<b>Liquefied Petroleum Gases</b>																	
Refinery .....	458	23	481	158	1,374	105	589	2,226	117	4,317	2,067	20	20	6,541	331	602	10,181
Bulk Terminal .....	—	—	1,106	—	—	—	—	21,864	—	—	—	—	—	45,881	48	1,247	70,146
Pipeline .....	—	—	2,784	—	—	—	—	6,786	—	—	—	—	—	3,236	40	0	12,846
Natural Gas Processing Plant .....	92	40	132	0	99	36	533	668	1,092	157	481	53	174	1,957	131	59	2,947
Total .....	—	—	4,503	—	—	—	—	31,544	—	—	—	—	—	57,615	550	1,908	96,120
<b>Ethane</b>																	
Refinery .....	0	0	0	0	7	0	0	7	0	1,302	0	0	0	1,302	0	0	1,309
Bulk Terminal .....	—	—	0	—	—	—	—	665	—	—	—	—	—	2,593	0	0	3,258
Pipeline .....	—	—	0	—	—	—	—	1,337	—	—	—	—	—	260	0	0	1,597

See footnotes at end of table.





Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, May 1983  
(Thousands of Barrels) (continued)

Commodity	PAD District I				PAD District II					PAD District III					PAD District IV		United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	PAD District IV		
															Rocky Mt.	West Coast	
<b>Isobutane</b>																	
Refinery .....	0	0	0	0	28	175	24	130	357	65	660	622	12	6	1,365	40	43
Bulk Terminal .....	—	—	0	—	—	—	—	—	1,430	—	—	—	—	—	4,804	0	81
Pipeline .....	—	—	0	—	—	—	—	—	554	—	—	—	—	—	140	0	0
Natural Gas Processing Plant .....	3	0	3	0	8	3	11	22	68	55	47	7	—	7	184	2	2
Total .....	—	—	3	—	—	—	—	—	2,363	—	—	—	—	—	6,493	42	126
<b>Other Hydrocarbons and Alcohol</b>																	
Refinery .....	77	0	77	0	119	0	0	0	119	1	88	21	0	0	110	0	7
Bulk Terminal .....	—	—	0	—	—	—	—	—	0	—	—	—	—	—	0	0	0
Pipeline .....	—	—	0	—	—	—	—	—	0	—	—	—	—	—	0	0	0
Natural Gas Processing Plant .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total .....	—	—	77	—	—	—	—	—	119	—	—	—	—	—	110	0	7
<b>Unfinished Oils</b>																	
Refinery .....	3,236	284	3,520	41	3,093	147	1,405	4,686	905	8,076	5,476	117	—	57	14,631	518	4,188
Naphthas and Lighter .....	2,337	29	2,366	0	2,151	8	673	2,832	645	5,977	1,340	24	—	43	8,029	616	3,959
Kerosene and Lighter Gas Oils .....	6,172	298	6,470	114	4,062	262	2,422	6,860	1,098	12,410	5,985	219	—	136	19,848	1,265	11,487
Heavy Gas Oils .....	1,520	259	1,779	1	3,376	24	1,329	4,730	618	4,776	3,218	29	—	0	8,641	774	5,203
Residuum .....	13,265	870	14,135	156	12,682	441	5,829	19,108	3,266	31,239	16,019	389	—	236	51,149	3,173	24,837
Total .....	—	—	4,215	—	—	—	—	7,706	—	—	—	—	—	—	16,312	2,118	7,460
<b>Motor Gasoline Blending Components</b>																	
Refinery .....	3,941	121	4,062	23	5,200	501	1,710	7,434	1,075	7,901	5,810	132	—	175	15,093	2,118	7,263
Bulk Terminal .....	—	—	153	—	—	—	—	42	—	—	—	—	—	—	1,080	0	197
Pipeline .....	—	—	0	—	—	—	—	230	—	—	—	—	—	—	139	0	369
Natural Gas Processing Plant .....	0	0	0	0	0	0	0	0	0	0	0	0	—	0	0	0	0
Total .....	—	—	4,215	—	—	—	—	7,706	—	—	—	—	—	—	16,312	2,118	7,460
<b>Aviation Gasoline Blending Components</b>																	
Refinery .....	25	0	25	0	153	0	42	195	64	37	128	0	—	0	229	0	60
Bulk Terminal .....	—	—	0	—	—	—	—	0	—	—	—	—	—	—	0	0	0
Pipeline .....	—	—	0	—	—	—	—	0	—	—	—	—	—	—	0	0	0
Natural Gas Processing Plant .....	0	0	0	0	0	0	0	0	0	0	0	0	—	0	0	0	0
Total .....	—	—	25	—	—	—	—	195	—	—	—	—	—	—	229	0	60
<b>Total Finished Motor Gasoline</b>																	
Refinery .....	5,145	221	5,366	106	6,214	1,183	3,182	10,685	1,757	9,423	5,024	710	—	176	17,090	2,376	6,179
Bulk Terminal .....	—	—	36,819	—	—	—	—	30,863	—	—	—	—	—	—	12,856	1,435	9,268
Pipeline .....	—	—	17,193	—	—	—	—	15,375	—	—	—	—	—	—	17,765	1,438	2,128
Natural Gas Processing Plant .....	21	0	21	0	0	0	0	0	0	0	0	0	—	0	0	8	0
Total .....	—	—	59,399	—	—	—	—	56,923	—	—	—	—	—	—	47,711	5,257	17,575
<b>Total Finished Motor Gasoline</b>																	
Refinery .....	2,173	120	2,293	64	2,989	721	1,875	5,649	926	4,298	2,300	410	—	87	8,021	1,442	2,703
Bulk Terminal .....	—	—	17,218	—	—	—	—	16,162	—	—	—	—	—	—	6,591	874	4,296
Pipeline .....	—	—	10,045	—	—	—	—	8,125	—	—	—	—	—	—	9,290	1,012	965
Natural Gas Processing Plant .....	8	0	8	0	0	0	0	0	0	0	0	0	—	0	0	5	0
Total .....	—	—	29,564	—	—	—	—	29,936	—	—	—	—	—	—	23,902	3,333	7,984
<b>Finished Leaded Motor Gasoline</b>																	
Refinery .....	2,173	120	2,293	64	2,989	721	1,875	5,649	926	4,298	2,300	410	—	87	8,021	1,442	2,703
Bulk Terminal .....	—	—	17,218	—	—	—	—	16,162	—	—	—	—	—	—	6,591	874	4,296
Pipeline .....	—	—	10,045	—	—	—	—	8,125	—	—	—	—	—	—	9,290	1,012	965
Natural Gas Processing Plant .....	8	0	8	0	0	0	0	0	0	0	0	0	—	0	0	5	0
Total .....	—	—	29,564	—	—	—	—	29,936	—	—	—	—	—	—	23,902	3,333	7,984

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, May 1983

(Thousands of Barrels) (continued)

(Thousands of Barrels) (continued)																	
Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Dist. V		
															Rocky Mt.		West Coast
<b>Finished Unleaded Motor Gasoline</b>																	
Refinery .....	2,972	101	3,073	42	3,225	462	1,307	5,036	831	5,125	2,724	300	89	9,069	934	3,476	21,588
Bulk Terminal .....	—	—	19,601	—	—	—	—	14,701	—	—	—	—	—	6,265	561	4,972	46,100
Pipeline .....	—	—	7,148	—	—	—	—	7,250	—	—	—	—	—	8,475	426	1,143	24,442
Natural Gas Processing Plant .....	13	0	13	0	0	0	0	0	0	0	0	0	0	0	3	0	16
Total .....	—	—	29,835	—	—	—	—	26,987	—	—	—	—	—	23,809	1,924	9,591	92,146
<b>Finished Aviation Gasoline</b>																	
Refinery .....	25	0	25	0	176	0	20	196	25	313	108	0	0	446	44	180	891
Bulk Terminal .....	—	—	487	—	—	—	—	362	—	—	—	—	—	142	8	363	1,362
Pipeline .....	—	—	33	—	—	—	—	56	—	—	—	—	—	7	0	0	96
Natural Gas Processing Plant .....	0	0	0	0	0	0	0	0	85	0	0	0	0	85	0	0	85
Total .....	—	—	545	—	—	—	—	614	—	—	—	—	—	680	52	543	2,434
<b>Naphtha-Type Jet Fuel</b>																	
Refinery .....	376	33	409	0	514	64	309	887	259	904	445	148	176	1,932	237	885	4,350
Bulk Terminal .....	—	—	17	—	—	—	—	543	—	—	—	—	—	160	6	544	1,270
Pipeline .....	—	—	125	—	—	—	—	91	—	—	—	—	—	511	104	256	1,087
Total .....	—	—	551	—	—	—	—	1,521	—	—	—	—	—	2,603	347	1,685	6,707
<b>Kerosene-Type Jet Fuel</b>																	
Refinery .....	1,158	0	1,158	33	1,366	55	202	1,656	351	3,154	2,047	6	19	5,577	425	3,353	12,169
Bulk Terminal .....	—	—	4,963	—	—	—	—	4,027	—	—	—	—	—	1,433	216	1,928	12,567
Pipeline .....	—	—	2,809	—	—	—	—	2,474	—	—	—	—	—	4,029	123	412	9,847
Natural Gas Processing Plant .....	—	—	8,930	—	—	—	—	8,157	—	—	—	—	—	11,039	764	5,693	34,583
Total .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>Kerosene</b>																	
Refinery .....	426	80	506	0	449	41	245	735	38	578	460	10	63	1,149	2	306	2,698
Bulk Terminal .....	—	—	3,044	—	—	—	—	956	—	—	—	—	—	661	25	78	4,764
Pipeline .....	—	—	291	—	—	—	—	266	—	—	—	—	—	210	0	0	767
Natural Gas Processing Plant .....	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	4
Total .....	—	—	3,841	—	—	—	—	1,957	—	—	—	—	—	2,024	27	384	8,233
<b>Distillate Fuel Oils</b>																	
Refinery .....	4,760	374	5,134	53	4,232	1,039	3,051	8,375	1,009	8,124	4,232	871	211	14,447	1,712	4,753	34,421
Bulk Terminal .....	—	—	26,305	—	—	—	—	14,946	—	—	—	—	—	6,208	690	4,337	52,486
Pipeline .....	—	—	5,763	—	—	—	—	7,085	—	—	—	—	—	8,100	547	772	22,267
<b>Distillate Fuel Oils</b>																	
Natural Gas Processing Plant .....	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	2
Total .....	—	—	37,202	—	—	—	—	30,406	—	—	—	—	—	28,757	2,949	9,862	109,176
<b>Residual Fuel Oils</b>																	
Refinery .....	3,463	149	3,612	57	1,749	157	128	2,091	270	5,424	3,253	188	57	9,192	505	6,795	22,195
Bulk Terminal .....	—	—	20,235	—	—	—	—	1,457	—	—	—	—	—	—	—	1,725	28,722
Pipeline .....	—	—	0	—	—	—	—	0	—	—	—	—	—	1	0	14	15
Total .....	—	—	23,847	—	—	—	—	3,548	—	—	—	—	—	14,498	505	8,534	50,932

See footnotes at end of table.

Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, May 1983  
(Thousands of Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La., Ark.	New Mexico	Total	Rocky Mt.		Dist V West Coast
<b>Naphtha &lt; 400 Deg. Petro. Feedstock</b>																	
Refinery .....	41	0	41	0	193	0	86	279	124	770	589	38	0	1,521	0	281	2,122
Total .....	41	0	41	0	193	0	86	279	124	770	589	38	0	1,521	0	281	2,122
<b>Other Oils &gt; 400 Deg. Petro. Feedstock</b>																	
Refinery .....	6	0	6	0	23	0	1	24	225	1,159	252	1	0	1,637	4	292	1,963
Total .....	6	0	6	0	23	0	1	24	225	1,159	252	1	0	1,637	4	292	1,963
<b>Special Naphthas</b>																	
Refinery .....	20	39	59	0	148	0	163	311	20	1,216	46	159	0	1,441	14	311	2,136
Bulk Terminal .....	—	—	740	—	—	—	—	211	—	—	—	—	—	97	0	44	1,092
Natural Gas Processing Plant .....	0	0	0	0	0	0	0	0	110	0	0	0	0	110	0	0	110
Total .....	—	—	799	—	—	—	—	522	—	—	—	—	—	1,648	14	355	3,338
<b>Lubricants</b>																	
Refinery .....	1,047	952	1,999	0	745	0	551	1,296	44	3,256	908	556	0	4,764	73	687	8,819
Bulk Terminal .....	—	—	1,458	—	—	—	—	830	—	—	—	—	—	330	7	685	3,310
Total .....	—	—	3,457	—	—	—	—	2,126	—	—	—	—	—	5,094	80	1,372	12,129
<b>Waxes</b>																	
Refinery .....	25	145	170	0	36	0	40	76	26	217	106	104	0	453	4	82	785
Bulk Terminal .....	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Pipeline .....	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	0	0
Natural Gas Processing Plant .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total .....	—	—	170	—	—	—	—	76	—	—	—	—	—	453	4	82	785
<b>Petroleum Coke</b>																	
Refinery .....	833	0	833	0	816	280	960	2,056	1	91	556	134	0	782	937	2,344	6,952
Total .....	833	0	833	0	816	280	960	2,056	1	91	556	134	0	782	937	2,344	6,952
<b>Asphalt and Road Oil</b>																	
Refinery .....	2,178	85	2,263	446	4,292	2,373	1,253	8,364	776	521	1,053	1,061	278	3,689	2,694	1,889	18,899
Bulk Terminal .....	—	—	2,920	—	—	—	—	4,247	—	—	—	—	—	629	55	270	8,121
Total .....	—	—	5,183	—	—	—	—	12,611	—	—	—	—	—	4,318	2,749	2,159	27,020
<b>Miscellaneous Products</b>																	
Refinery .....	269	35	304	1	64	8	17	90	39	253	52	44	0	388	1	249	1,032
Bulk Terminal .....	—	—	30	—	—	—	—	35	—	—	—	—	—	271	0	84	420
Pipeline .....	—	—	0	—	—	—	—	24	—	—	—	—	—	207	0	0	231
<b>Miscellaneous Products</b>																	
Natural Gas Processing Plant .....	0	0	0	0	1	0	0	1	60	2	0	1	0	63	1	0	65
Total .....	—	—	334	—	—	—	—	150	—	—	—	—	—	929	2	333	1,748
<b>Total Stocks, All Oils .....</b>																	
	—	—	184,357	—	—	—	—	265,658	—	—	—	—	—	742,232	34,965	169,897	1,397,109

1 Includes 33,879 thousands of barrels of domestic crude oil.

Sources: See Explanatory Notes on Data Collection and Estimation.

— Not Applicable.

Table 21. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, May 1983  
(Thousands of Barrels)

Commodity	From I to			From II to					From III to					From IV to					From V to		
	II	III	V	I	III	IV	V	I	II	IV	V	II	III	V	I	II	III	IV			
Crude Oil (Tanker and Barge only)																					
49	0	0	0	0	0	0	0	425	1,255	0	0	0	0	0	0	0	0	0			
Petroleum Products																					
8,091	853	0	0	3,331	6,121	2,099	429	80,625	20,466	0	2,273	1,461	458	1,359	0	0	0	0			
	0	0	0	0	202	0	0	0	485	0	0	4	0	0	0	0	0	0			
	0	0	0	0	433	0	0	0	1,361	0	0	483	458	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	0	0	0	852	2,254	60	0	840	3,493	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	877	57	0	0	0	0	0	0	0	0	0			
	169	0	0	0	58	0	0	82	1,034	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	0	0	0	1,644	1,923	1,307	0	47,511	7,693	0	888	573	0	936	0	0	0	0			
	5,658	163	0	0	1,024	742	0	20,196	3,424	0	539	389	0	639	0	0	0	0			
	3,413	0	0	611	899	565	0	27,315	4,269	0	349	184	0	297	0	0	0	0			
	2,245	163	0	1,033	0	0	0	232	125	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	582	137	0	320	88	0	90	0	0	0	0			
	98	0	0	0	110	0	0	8,337	1,799	0	271	0	0	101	0	0	0	0			
	173	0	0	193	48	468	0	408	54	0	0	0	0	0	0	0	0	0			
	8	0	0	0	0	0	0	18,053	3,105	0	399	313	0	232	0	0	0	0			
	2,095	291	0	298	869	264	0	2,154	226	0	200	0	0	0	0	0	0	0			
	0	111	0	89	137	0	429	0	0	0	0	0	0	0	0	0	0	0			

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 22. Movements of Petroleum Products by Pipeline between PAD Districts, May 1983  
(Thousands of Barrels)

Commodity	From I to				From II to				From III to				From IV to				From V to			
	II	III	I	III	I	III	IV	I	I	II	IV	V	II	III	V	III	IV	III	IV	V
Natural Gasoline and Isopentane .....	0	0	0	0	0	202	0	0	0	485	0	0	0	4	0	0	0	0	0	0
Unfractionated Stream .....	0	0	0	0	0	433	0	0	0	1,361	0	0	0	483	0	0	0	0	0	0
Plant Condensate .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases .....	0	0	852	2,254	60	696	0	0	0	3,458	0	0	0	0	0	0	0	0	0	0
Motor Gasoline Blending Components .....	0	0	0	0	0	0	0	0	0	1,034	0	0	0	0	0	0	0	0	0	0
Aviation Gasoline Blending Components .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline .....	3,907	0	1,383	1,923	1,307	36,144	0	0	0	6,716	0	881	0	573	0	936	0	0	0	0
Finished Motor Gasoline .....	2,243	0	513	1,024	742	15,292	2,997	0	0	2,997	0	539	0	389	0	639	0	0	0	0
Finished Unleaded Motor Gasoline .....	1,664	0	870	899	565	20,852	3,719	0	0	3,719	0	342	0	184	0	297	0	0	0	0
Finished Aviation Gasoline .....	0	0	0	0	0	0	0	0	0	87	0	0	0	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel .....	0	0	0	0	0	110	0	0	0	337	0	0	0	88	0	90	0	0	0	0
Kerosene-Type Jet Fuel .....	65	0	185	48	468	6,059	1,635	0	0	1,635	0	158	0	0	0	101	0	0	0	0
Kerosene .....	8	0	0	0	0	0	0	0	0	54	0	0	0	0	0	0	0	0	0	0
Distillate Fuel Oil .....	1,506	0	239	869	264	14,224	2,627	0	0	399	0	313	0	232	0	0	0	0	0	0
Residual Fuel Oil .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products .....	0	0	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total .....	5,486	0	2,794	5,839	2,099	57,743	17,594	0	0	1,758	0	1,461	458	1,359	0	0	0	0	0	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 23. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, May 1983  
(Thousands of Barrels)

Commodity	From I to				From II to				From III to				From IV to				From V to			
	II	III	V	I	I	III	V	I	I	New Eng	Cent Atl	Low Atl	II	V	I	II	III	IV	V	III
Crude Oil .....	49	0	0	0	0	0	0	0	0	425	0	425	0	1,255	0	3,142	0	18,599	0	18,599
Petroleum Products .....	2,605	853	0	0	0	0	0	0	0	22,882	1,002	4,288	17,592	2,872	515	0	0	0	0	0
Liquefied Petroleum Gases .....	0	0	0	0	0	0	0	0	0	144	0	0	144	35	0	0	0	0	0	0
Unfinished Oils .....	0	169	0	0	0	58	0	0	0	877	0	877	0	57	0	0	0	0	0	0
Motor Gasoline Blending Components .....	0	0	0	0	0	0	0	0	0	45	0	45	37	0	0	0	0	0	0	0
Finished Motor Gasoline .....	1,751	163	0	0	0	0	0	0	0	11,367	312	618	10,437	977	7	0	0	0	0	0
Finished Aviation Gasoline .....	0	0	0	0	0	0	0	0	0	225	0	109	116	38	0	0	0	0	0	0
Naphtha-Type Jet Fuel .....	98	0	0	0	0	0	0	0	0	245	0	166	79	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel .....	108	0	0	0	0	0	0	0	0	2,278	0	166	2,112	164	113	0	0	0	0	0
Kerosene .....	0	0	0	0	0	0	0	0	0	132	0	89	43	0	0	0	0	0	0	0
Distillate Fuel Oil .....	589	291	0	0	0	59	0	0	0	3,829	345	797	2,687	478	0	0	0	0	0	0
Residual Fuel Oil .....	0	111	0	0	0	89	0	0	0	2,154	279	531	1,344	226	200	0	0	0	0	0
Naphtha and Other Oils for Petro. Feed Use .....	5	0	0	0	0	10	0	0	0	214	66	33	115	26	0	0	0	0	0	0
Special Naphthas .....	0	0	0	0	0	23	0	0	0	209	0	150	59	157	0	0	0	0	0	0
Lubricants .....	0	36	0	0	0	55	0	0	0	777	0	605	172	414	176	0	0	0	0	0
Waxes .....	0	0	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0	0	0	0
Asphalt and Road Oil .....	0	0	0	0	0	14	0	0	0	221	0	9	212	228	0	0	0	0	0	0
Miscellaneous Products .....	54	83	0	0	0	18	87	0	0	121	0	86	35	72	19	0	0	0	0	0
Total .....	2,654	853	0	537	282	429	23,307	1,002	4,713	17,592	4,127	515	3,142	0	18,599	0	18,599	0	18,599	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 24. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge Between PAD Districts, May 1983  
(Thousands of Barrels)

Commodity	P.A.D. District I			P.A.D. District II			P.A.D. District III			P.A.D. District IV			P.A.D. District V		
	Receipts into PADD I	Shipments from PADD I	Net Receipts PADD I	Receipts into PADD II	Shipments from PADD II	Net Receipts PADD II	Receipts into PADD III	Shipments from PADD III	Net Receipts PADD III	Receipts into PADD IV	Shipments from PADD IV	Net Receipts PADD IV	Receipts into PADD V	Shipments from PADD V	Net Receipts PADD V
Crude Oil (Tanker and Barge only)	3,557	49	3,518	1,304	0	1,304	18,599	1,680	16,919	0	0	0	0	21,741	-21,741
Petroleum Products	83,956	8,944	75,012	30,018	11,980	18,038	7,432	103,364	-95,932	2,099	3,278	-1,179	4,061	0	4,061
Natural Gasoline	0	0	0	489	202	287	202	485	-283	0	4	-4	0	0	0
Unfractionated Stream	0	0	0	1,844	433	1,411	891	1,361	-470	0	941	-941	0	0	0
Plant Condensate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gases	1,692	0	1,692	3,493	3,166	327	2,254	4,333	-2,079	60	0	60	0	0	0
Unfinished Oils	877	169	708	57	58	-1	227	934	-707	0	0	0	0	0	0
Unfinished Oils	82	0	82	1,034	0	1,034	0	1,116	-1,116	0	0	0	0	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	49,155	5,821	43,334	13,924	4,874	9,050	2,086	56,092	-54,006	1,307	1,509	-202	1,824	0	1,824
Finished Motor Gasoline	20,807	3,413	17,394	7,226	2,377	4,849	1,024	24,159	-23,135	742	1,028	-286	1,178	0	1,178
Finished Leaded Motor Gasoline	28,348	2,408	25,940	6,698	2,497	4,201	1,062	31,933	-30,871	565	481	84	646	0	646
Finished Aviation Gasoline	232	0	232	125	0	125	0	357	-357	0	0	0	0	0	0
Naphtha-Type Jet Fuel	582	98	484	323	110	213	110	1,039	-929	0	178	-178	410	0	410
Kerosene-Type Jet Fuel	8,530	173	8,357	1,972	709	1,263	48	10,407	-10,359	468	101	367	372	0	372
Kerosene	408	8	400	62	0	62	0	462	-462	0	0	0	0	0	0
Distillate Fuel Oil	18,351	2,386	15,965	5,513	1,431	4,082	1,160	21,557	-20,397	254	545	-281	631	0	631
Residual Fuel Oil	2,243	111	2,132	226	655	-429	248	2,580	-2,332	0	0	0	629	0	629
Naphtha and Other Oils for Petro.	224	5	219	31	10	21	0	240	-240	0	0	0	0	0	0
Feedstock Use	232	0	232	157	23	134	0	366	-366	0	0	0	0	0	0
Special Naphthas	832	36	796	414	55	359	36	1,367	-1,331	0	0	0	176	0	176
Lubricants	7	0	7	0	0	0	0	7	-7	0	0	0	0	0	0
Waxes	235	0	235	228	14	214	0	449	-449	0	0	0	0	0	0
Asphalt and Road Oil	274	137	137	126	240	-114	170	212	-42	0	0	0	19	0	19
Miscellaneous Products															
Total All Products	87,523	8,993	78,530	31,322	11,980	19,342	26,031	105,044	-79,013	2,099	3,278	-1,179	4,061	21,741	-17,680

Sources: See Explanatory Notes on Data Collection and Estimation.

Table 25. Production of Residual Fuel Oil By Sulfur Content, May 1983  
(Thousands of Barrels)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La. Ark.	New Mexico	Total	Rocky Mt.		Dist. V West Coast
Residual Fuel Oil	2,635	171	2,806	53	1,454	223	322	2,052	583	7,765	3,760	269	85	12,462	296	11,220	28,836
0.00 to 0.30% Sulfur	638	42	680	0	99	0	105	204	6	431	835	96	7	1,376	28	801	3,089
0.31 to 1.00% Sulfur	1,810	2	1,812	2	375	0	83	460	512	1,191	1,349	41	5	3,098	84	2,566	8,020
Greater Than 1.00% Sulfur	187	127	314	51	980	223	134	1,388	65	6,143	1,575	132	73	7,988	184	7,853	17,727

Source: See Explanatory Notes on Data Collection and Estimation.

Table 26. Stocks of Residual Fuel Oil By Sulfur Content, May 1983  
(Thousands of Barrels)

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States			
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Daks.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La. Ark.	New Mexico		Total	Rocky Mt.	Dist. V West Coast
Residual Fuel Oil -- 0.00 to 0.30% Sulfur																	
Refinery	491	48	539	0	115	0	5	120	55	212	138	19	21	445	142	415	1,661
Bulk Terminal	—	—	3,170	—	—	—	—	32	—	—	—	—	—	109	0	0	3,311
Total	—	—	3,709	—	—	—	—	152	—	—	—	—	—	554	142	415	4,972
Residual Fuel Oil -- 0.31 to 1.00% Sulfur																	
Refinery	1,843	3	1,846	56	593	0	64	713	145	1,594	1,253	94	8	3,094	83	1,407	7,143
Bulk Terminal	—	—	6,498	—	—	—	—	541	—	—	—	—	—	2,669	0	562	10,270
Total	—	—	8,344	—	—	—	—	1,254	—	—	—	—	—	5,763	83	1,969	17,413
Residual Fuel Oil -- Greater than 1.00% Sulfur																	
Refinery	1,129	98	1,227	1	1,041	157	59	1,258	70	3,618	1,862	75	28	5,653	280	4,973	13,391
Bulk Terminal	—	—	10,567	—	—	—	—	884	—	—	—	—	—	2,527	0	1,163	15,141
Total	—	—	11,794	—	—	—	—	2,142	—	—	—	—	—	8,180	280	6,136	28,532

Sources: See Explanatory Notes on Data Collection and Estimation.  
— Not Applicable

Table 27. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, By Sulfur Content, May 1983  
(Thousands of Barrels)

Commodity	From I to			From II to			From III to			From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	III
Residual Fuel Oil	0	111	0	89	137	429	2,154	279	531	1,344	226	200
0.00 to 0.30% Sulfur	0	0	0	0	0	0	0	0	0	0	0	0
0.31 to 1.00% Sulfur	0	0	0	0	0	0	220	0	220	0	0	0
Greater Than 1.00% Sulfur	0	111	0	89	137	429	1,934	279	311	1,344	177	200

Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, May 1983  
(Thousands of Barrels)

Country	Residual Fuel Oil			
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	Total
<b>Arab OPEC</b>				
Algeria	1,853	0	0	1,853
Iraq	0	0	0	0
Kuwait	0	0	0	0
Qatar	0	0	0	0
Saudi Arabia	0	0	0	0
United Arab Emirates	0	0	0	0
Subtotal Arab OPEC	1,853	0	0	1,853
<b>Other OPEC</b>				
Ecuador	0	0	0	0
Gabon	0	0	0	0
Indonesia	828	33	8	870
Iran	0	0	0	0
Nigeria	0	0	0	0
Venezuela	1,173	159	5,515	6,847
Subtotal Other OPEC	2,001	192	5,524	7,716
<b>Other</b>				
Angola	0	304	28	332
Australia	251	0	0	251
Bahamas	347	543	0	890
Bolivia	0	0	0	0
Brazil	1,075	0	0	1,075
Brunei	0	0	0	0
Canada	617	185	230	1,032
Congo	0	177	0	177
Egypt	0	0	0	0
France	0	0	0	0
Liberia	0	0	0	0
Malaysia	0	0	597	597
Mexico	0	0	0	0
Netherlands	0	321	3,041	3,362
Netherlands Antilles	0	0	0	0
Norway	0	0	0	0
Oman	0	0	0	0
People's Republic of China	0	0	0	0
Peru	0	262	0	262
Puerto Rico	0	0	0	0
Romania	0	0	0	0
Spain	0	0	0	0
Trinidad	90	0	497	587
United Kingdom	0	0	0	0
Virgin Islands	191	1,678	664	2,533
Yugoslavia	0	0	0	0
Zaire	0	555	256	811
Other Western Hemisphere	389	103	5	497
Other Eastern Hemisphere	2,960	4,127	5,318	12,406
Subtotal Other	6,814	4,320	10,842	21,975
<b>Total Imports</b>				

(S) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.



Table 29. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, May 1983  
(Thousands of Barrels)

State	Residual Fuel Oil				Total
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%		
<b>PAD District I</b>					
Delaware	4,826	3,979	9,833		18,638
Florida	0	0	183		183
Georgia	0	639	1,416		2,055
Maine	0	0	78		78
Maryland	0	0	648		648
Massachusetts	69	0	498		567
New Jersey	90	40	846		976
New York	192	451	1,838		2,481
North Carolina	4,157	1,231	1,965		7,353
Pennsylvania	0	0	110		110
Rhode Island	225	1,549	440		2,215
South Carolina	0	0	107		107
Vermont	162	0	619		619
Virginia	0	0	162		162
			1,084		1,084
<b>PAD District II</b>					
Illinois	403	46	51		500
Michigan	0	46	0		46
Minnesota	356	0	0		356
Missouri	11	0	8		18
North Dakota	36	0	0		36
Ohio	0	0	14		14
			29		29
<b>PAD District III</b>					
Louisiana	1,196	159	746		2,101
Mississippi	433	0	230		663
New Mexico	0	0	0		0
Texas	762	159	516		1,438
<b>PAD District IV</b>					
Montana	0	0	3		3
			3		3
<b>PAD District V</b>					
Arizona	389	136	208		733
California	0	0	0		0
Hawaii	0	0	1		1
Oregon	389	136	13		539
	0	0	194		194
<b>All PAD Districts</b>	<b>6,814</b>	<b>4,320</b>	<b>10,842</b>		<b>21,975</b>

Note: Total may not equal sum of components due to independent rounding.  
Sources: See Explanatory Notes on Data Collection and Estimation.

# Glossary





# Definitions of Petroleum Products and Other Terms

**Alcohol.** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group;  $\text{CH}-(\text{CH})_n-\text{OH}$ . *Alcohol* includes methanol and ethanol.

**Alkylation.** A refinery process for chemically combining isoparaffin with olefin hydrocarbons. The product, alkylate, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

**API Gravity.** An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Deg API} = \frac{141.5}{\text{sp gr } 60\text{F}/60\text{F}} - 131.5$$

**Aromatics.** Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene.

**Asphalt.** A dark-brown-to-black cement-like material, containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

**ASTM.** The acronym for the American Society for Testing and Materials.

**Aviation Gasoline Blending Components.** Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

**Aviation Gasoline, Finished.** All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

**Barrel.** A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt and wax to barrels are given in the definitions for these products.

**Barrels per Calendar Day.** The maximum number of barrels of input that can be processed in a twenty-four hour period after making allowances for the following limitations: downstream limitations, environmental constraints, types and grades of inputs, planned and unplanned downtime, and types and grades of products.

**Barrels Per Stream Day.** The amount a unit can process running at full capacity under optimal crude and product slate conditions.

**Bi-metallic.** A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of two metals (e.g., platinum, rhodium).

**Butane.** A normally gaseous paraffinic hydrocarbon,  $\text{C}_4\text{H}_{10}$ . It is extracted from natural gas or refinery gas streams. Butane is covered by ASTM Specification D1835 and Gas Processors Association Specification for commercial butane.

**Isobutane.** A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. This classification includes mixtures of gases that contain 80 percent liquid volume or more isobutane. It is extracted from natural gas and refinery gas streams.

**Normal Butane.** A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. This classification includes mixtures of gases that contain 80 percent or more normal butane.

**Other Butanes.** All butanes not included as normal butane or isobutane.

**Butane-Propane Mixtures.** Mixtures consisting exclusively of butane and propane that conform to ASTM Specification D1835 and Gas Processors Association Specification for commercial butane-propane mixtures. They are extracted from natural gas and refinery gas streams.

**Butylene.** An olefinic hydrocarbon,  $\text{C}_4\text{H}_8$ , recovered from refinery processes.

**Catalytic Cracking.** The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil.

**Catalytic Hydrocracking.** A refining process for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. Hydrocracking is an efficient, relatively low temperature process using hydrogen and a catalyst.

**Catalytic Hydrotreating.** A process for treating petroleum fractions (e.g., distillate fuel oil and residual fuel oil) and unfinished oils (e.g., naphthas, reformer feeds and heavy gas oil) in the presence of catalysts and substantial quantities of hydrogen to upgrade their quality.

**Catalytic Reforming.** The use of controlled heat and pressure with catalysts to effect the rearrangement of certain hydrocarbon molecules without altering their composition appreciably; the conversion of low-octane

gasoline fractions into higher octane stocks suitable for blending into finished gasoline; also the conversion of naphthas to obtain a more volatile product of higher octane number.

**Conventional.** A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of a metal and a non-metal (e.g., platinum, alumina).

**Coal.** A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite coal which conform to ASTM Specification D388.

**Crude Distillation.** The refining process of separating crude oil components by heating and subsequent condensing of the fractions by cooling.

**Crude Oil** (Including Lease Condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gas is also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign according to the following:

**Domestic.** Crude oil produced in the United States or from its outer continental shelf as defined in 43 U.S.C. 1331.

**Foreign.** Crude oil produced outside the United States.

**Delayed Coking.** A process to produce low Conradson carbon gas for catalytic cracking feedstock and for gasoline.

**Distillate Fuel Oil.** A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuel.

**No. 1 Fuel Oil.** A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 420 degrees F. at the 10-percent point and 550 degrees F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

**No. 2 Fuel Oil.** A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM

Specification D396 specifies for this grade distillation temperatures at the 90-percent point between 540 degrees and 640 degrees F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

**No. 1 and No. 2 Diesel Fuel Oils.** Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D975:

**No. 1-D.** A volatile distillate fuel oil with a boiling range between 300-575 degrees F. and used in high-speed diesel engines generally operated under wide variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specifications D975.

**No. 2-D.** A gas oil type distillate of lower volatility with distillation temperatures at the 90-percent point between 540-640 degrees F. for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

**No. 4 Fuel Oil.** A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D975.

**Eastern Hemisphere.** That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa, and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

**Electric Energy (Purchased).** Electricity purchased for refinery operations that is not produced within the refinery complex.

**Ethane.** A normally gaseous paraffinic compound (C<sub>2</sub>H<sub>6</sub>) extracted from natural gas and refinery gas streams. "Ethane" includes any products containing 90 percent liquid volume or more ethane.

**Ethane-Propane Mixtures.** Mixtures of ethane and propane in which neither component is 90 percent or more of the liquid volume. It is extracted from natural gas and refinery gas streams.

**Ethylene.** An olefinic hydrocarbon, (C<sub>2</sub>H<sub>4</sub>) recovered from refinery or petrochemical processes.

**Field Production.** Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

**Fluid Coking.** A thermal process utilizing the fluidized-solids technique for continuous conversion of heavy, low-grade oils into lighter products.

**Gasoline Blending Components.** Finished components in the gasoline range which will be used for blending or compounding into finished aviation or motor gasoline.

**Gas Oil.** A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. Derives its name from having originally been used in the manufacture of illuminating gas. Now supplies distillate-type fuel oils and diesel fuel, also cracked to produce gasoline.

**Imported Crude Oil Burned as Fuel.** The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. *Imported crude oil burned as fuel* includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and oil shale.

**Isomerization.** A refining process which alters the fundamental arrangement of atoms in the molecule. Used to convert normal butane into isobutane, an alkylation process feedstock, and normal pentane and hexane into isopentane and isohexane, high-octane gasoline components.

**Kerosene.** A petroleum distillate that boils at a temperature between 300-550 degrees F., that has a flash point higher than 100 degrees F. by ASTM Method D56, that has a gravity range from 40-46 degrees API, and that has a burning point in the range of 150-175 degrees F. Included are the two classifications recognized by ASTM D-3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil which have properties similar to No. 1 fuel oil, but with a gravity of about 43 degrees API and a maximum end-point of 625 degrees F. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

**Kerosene-Type Jet Fuel.** A quality kerosene product with an average gravity of 40.7 degrees API, a 10 percent distillation temperature of 400 degrees F. It is covered by ASTM Specification D1655 and Military Specifications MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial turbojet and turbo-prop aircraft engines.

**Lease Condensate.** A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

**Liquefied Petroleum Gases (LPG).** Propane, propylene, butanes, butylene, butane-propane mixtures, ethane-propane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

**Liquefied Refinery Gases (LRG).** Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane. Excludes still gases used for chemical or rubber manufacture which are reported as a petrochemical feedstock and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstocks or other uses.

**Lubricating Oils.** A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. *Lubricants* includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include Bright Stock, Neutral, and Other.

**Bright Stock.** A refined, high viscosity lubricating oil base stock that is usually made from residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

**Neutral.** A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.

**Other.** A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

**Middle Distillates.** A general classification that includes distillate fuel oil and kerosene.

**Miscellaneous Products.** Includes all finished products not classified elsewhere, e.g., petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, specialty oils and medicinal oils.

**Motor Gasoline Blending Components.** Finished components in the gasoline range which will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

**Motor Gasoline, Finished.** A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Specifications for motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a boiling range of 122 degrees to 158 degrees F. at the 10-percent point to 365 degrees to 374 degrees F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. *Motor gasoline* includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

**Finished Leaded Gasoline.** Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

**Finished Unleaded Gasoline.** Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blend stock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

**Gasohol.** A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

**Motor Gasoline, Total.** Includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

**Naphtha-Type Jet Fuel.** A fuel in the heavy naphtha boiling range with an average gravity of 52.8 degrees API and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F., meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

**Natural Gas.** A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

**Natural Gas Field Facility.** A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, butane, natural gasoline, etc., and to control the quality of natural gas to be marketed.

**Natural Gas Plant Liquids.** Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials, and are classified as follows: Ethane, propane, ethane-propane mix, isobutane, butane, butane-propane mix, isopentane, natural gasoline, plant condensate, unfractionated stream, and other products from natural gas processing plants (i.e., products meeting the standards of finished petroleum products produced at natural gas processing plants, such as finished

motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

**Natural Gasoline and Isopentane.** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, C<sub>5</sub>H<sub>12</sub>, obtained by fractionation of natural gasoline or isomerization of normal pentane.

**OPEC.** The acronym for the Organization of Petroleum Exporting Countries, oil-producing and exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

**Operable Distillation Capacity.** The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within 90 days.

**Other Hydrocarbons.** Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

**Petrochemical Feedstock Use.** Chemical feedstocks derived from petroleum, principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are *Naphtha-less than 400 degrees F. end-point* and *Other oils-over 400 degrees F. end-point*.

**Naphtha-Less Than 400 Degrees F. End-Point.** A naphtha with an end point of less than 400 degrees F. that is reported as used as a petrochemical feedstock.

**Other Oils-Over 400 Degrees F. End-Point.** Oils with an end point over 400 degrees F. that is reported as used as a petrochemical feedstock.

**Petroleum Coke.** A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is five barrels of 42 U.S. gallons per short ton.

**Marketable Coke.** Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This *green* coke may be sold or further purified by calcining.

**Catalyst Coke.** In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refinery process. This carbon or coke is not recoverable in a concentrated form.

**Petroleum Products.** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils-over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

**Petroleum Refinery.** An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

**Plant Condensate.** One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

**Primary Stocks.** Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. *Primary Stocks* excludes stocks of foreign origin that are held in bonded warehouse storage.

**Propane.** A normally gaseous paraffinic compound, C<sub>3</sub>H<sub>8</sub>, which includes all products covered by NGPA Specification for commercial and HD-5 propane and ASTM Specification D1835. It is used primarily as a fuel and as a petrochemical feedstock.

**Propylene.** An olefinic hydrocarbon, C<sub>3</sub>H<sub>6</sub>, recovered from refinery or petrochemical processes.

**Residual Fuel Oil.** The topped crude of refinery operation which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Includes imported crude oil to be burned as a fuel.

**Road Oil.** Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in

six grades from 0, the most liquid, to 5, the most viscous.

**Special Naphthas.** All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees F. *Special naphthas* includes all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

**Steam (Purchased).** Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

**Still Gas (Refinery Gas).** Any form or mixture of gas produced in refineries by distillation cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use.

**Petrochemical Feedstock Use.** Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc., are considered petrochemical products; therefore, only their feed-stock equivalents are included.

**Fuel Use.** All other still gas.

**Strategic Petroleum Reserve (SPR).** Stocks (currently, only crude oil) maintained by the Federal Government for use during periods of major supply interruption.

**Thermal Cracking.** A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking is used to increase the yield of gasoline obtainable from crude oil.

**Unfinished Oils.** Includes all oils requiring further processing, except those requiring only mechanical blending.

**Unfractionated Streams.** Mixtures of unsegregated natural gas liquid components excluding those included in plant condensate. This product is extracted from natural gas.

**Vacuum Distillation.** Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique, with its relatively low temperatures, prevents cracking or decomposition of the charge stock.

**Visbreaking.** A thermal cracking process in which heavy vacuum-still bottoms produced on the primary



distillation unit are cracked to increase production of distillate products.

**Wax.** A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42-gallon barrel.

**Microcrystalline Wax.** Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics:

Penetration at 77 degrees F. (D-1321)-60 maximum.  
Viscosity at 210 degrees F. in Saybolt Universal Sec-

onds (SUS) (D-88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D-721)-5 percent minimum.

**Crystalline-Fully Refined Wax.** A light-colored paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.5 percent maximum. Other + 20 color, Saybolt minimum.

**Crystalline-Other Wax.** A paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.51 percent minimum to 15 percent maximum.

**Western Hemisphere.** That half of the earth that includes North and South America and the surrounding waters.

# Bureau of Mines Petroleum Refining Districts and PAD Districts

*The following are the Bureau of Mines petroleum refining districts which make up the PAD districts:*

## PAD District I

**East Coast:** District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

**Appalachian #1:** The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

## PAD District II

**Appalachian #2:** The following counties of the State of Ohio: Erie, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

**Indiana—Illinois—Kentucky:** The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

**Minnesota—Wisconsin—North and South Dakota:** The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

**Oklahoma—Kansas—Missouri:** The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

## PAD District III

**Texas Inland:** The State of Texas except the Texas Gulf Coast District.

**Texas Gulf Coast:** The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

**Louisiana Gulf Coast:** The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

**North Louisiana—Arkansas:** The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

**New Mexico:** The State of New Mexico.

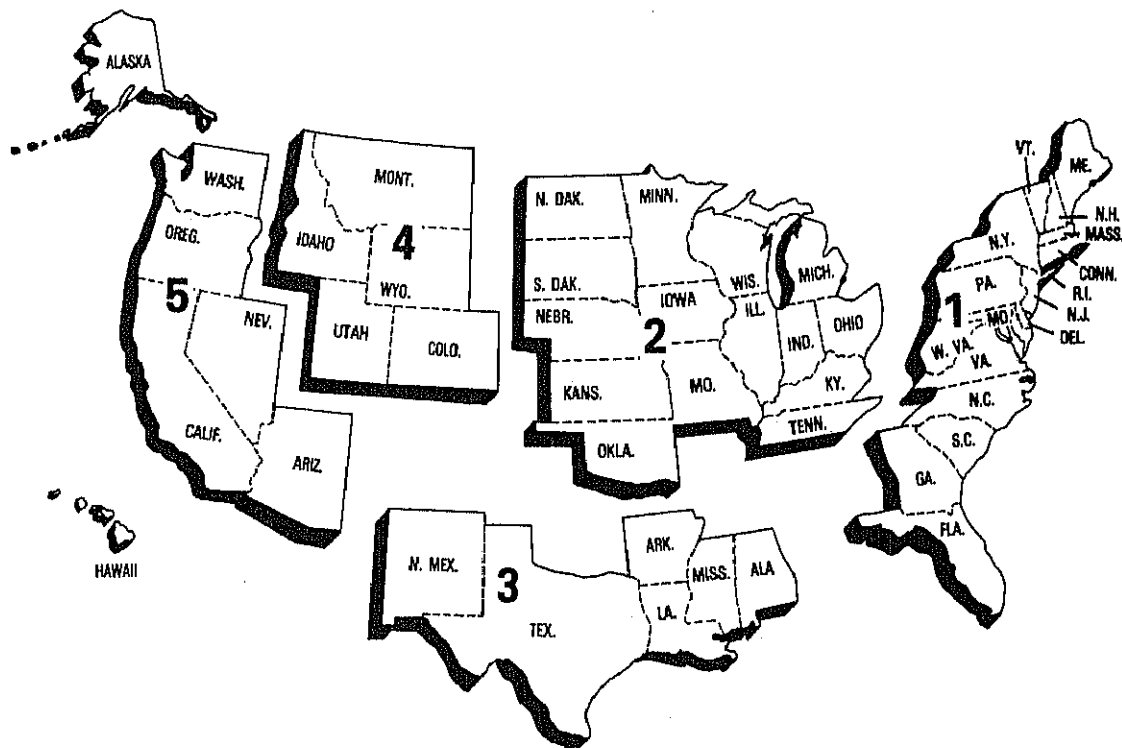
## PAD District IV

**Rocky Mountain:** The States of Montana, Idaho, Wyoming, Utah, and Colorado.

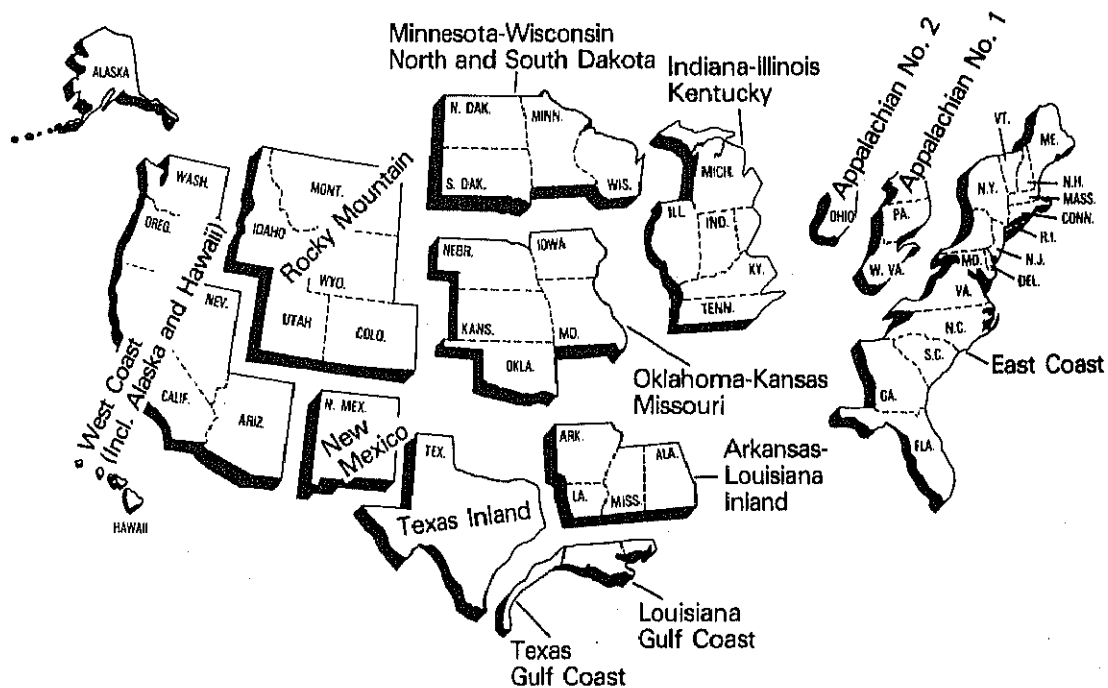
## PAD District V

**West Coast:** The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

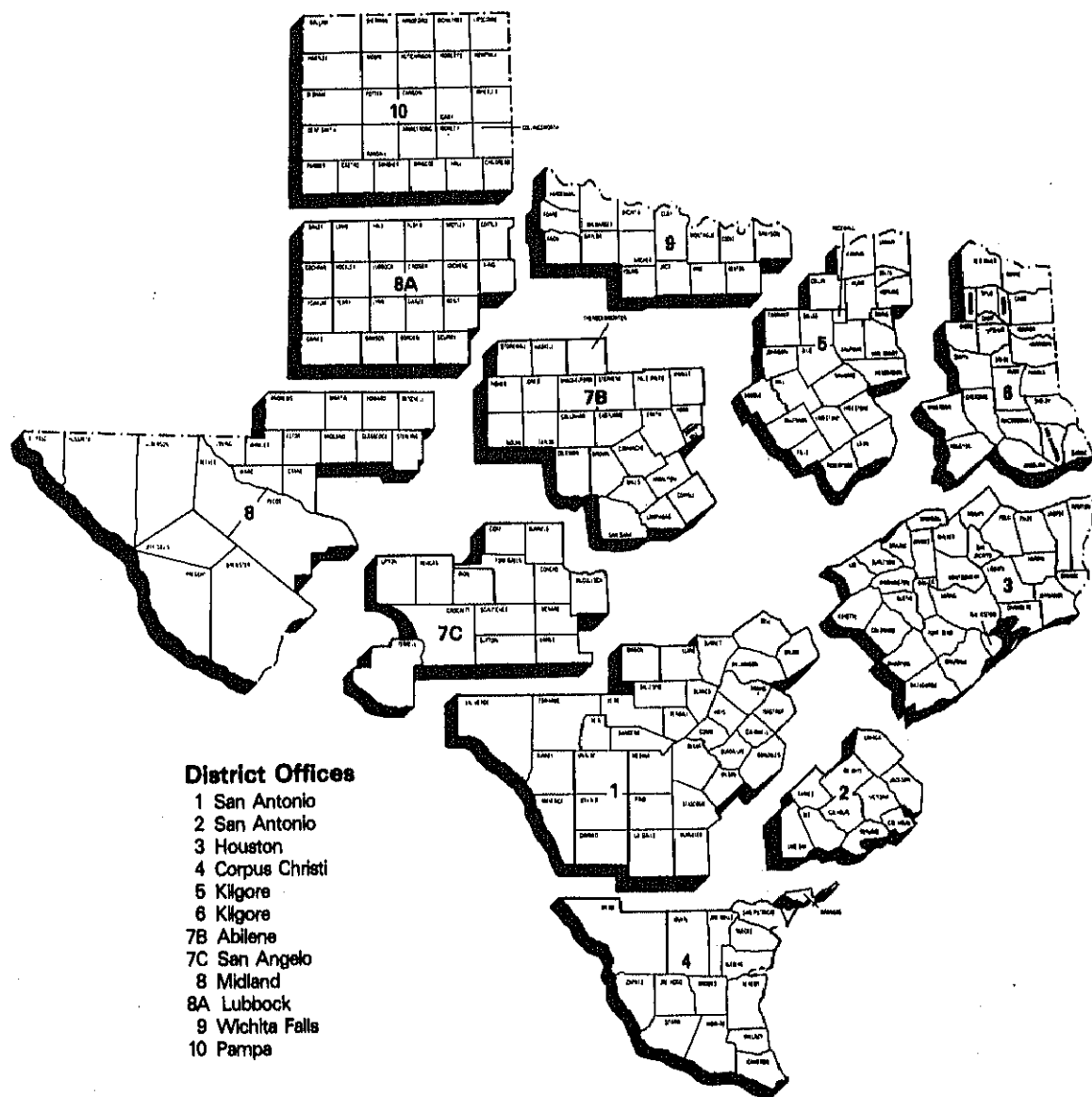
## Petroleum Administration for Defense (PAD) Districts



## Bureau of Mines Refining Districts

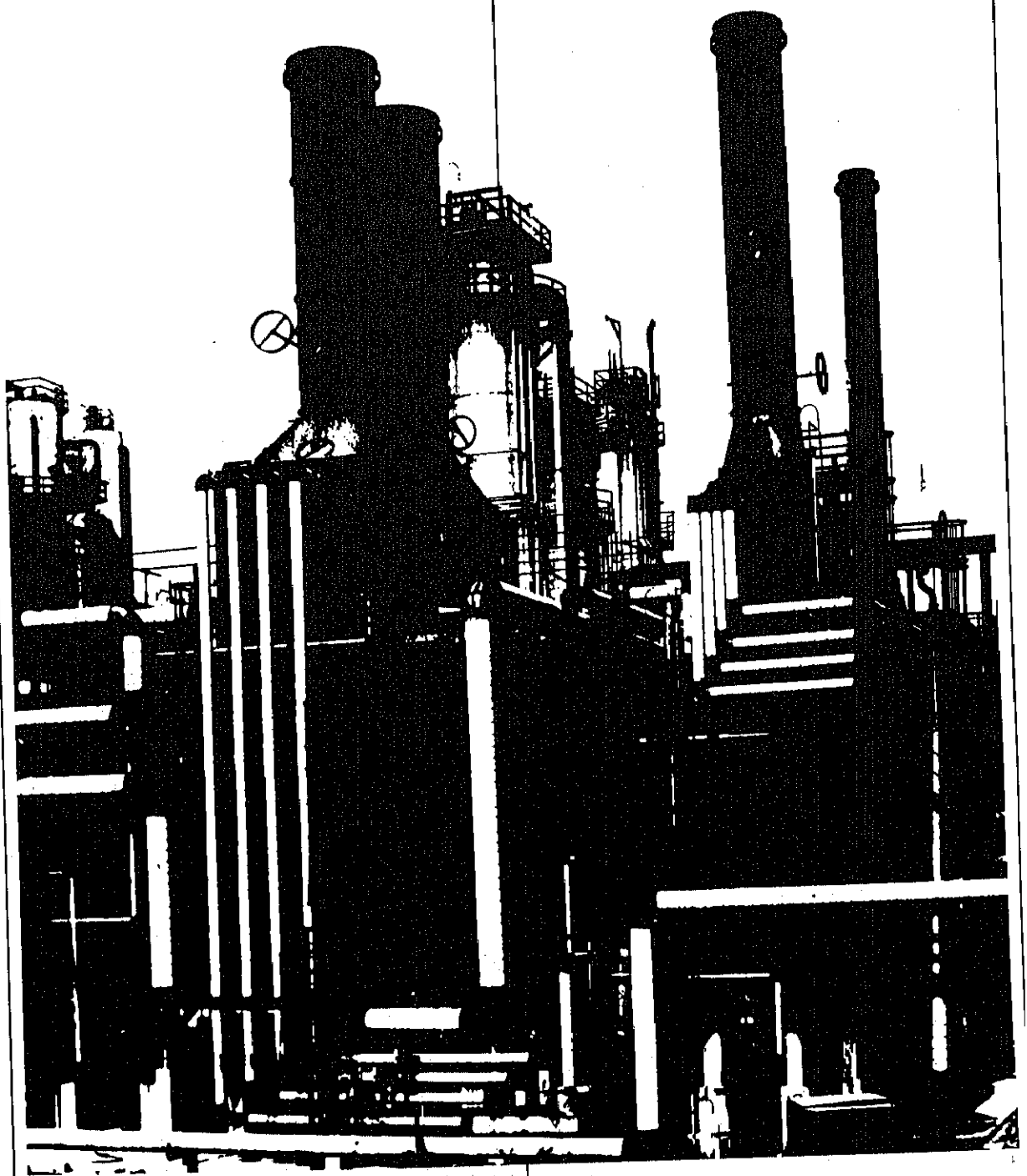


## District Map Oil and Gas Division Railroad Commission of Texas





# Explanatory Notes





## Note 1: Data Collection Methodology

### Background

Beginning in January 1983, the Energy Information Administration (EIA) unified its petroleum supply data collection activities into the Petroleum Supply Reporting System (PSRS). The PSRS represents a family of data collection survey forms, data processing systems and publication systems that have been consolidated to achieve comparability and consistency throughout. The primary focus of the consolidation has been to revise the weekly and monthly survey reporting forms to assure consistency in form layout, preparation instructions, and definitions. As a result, a new set of survey forms were implemented in January 1983. The following are the new form numbers and their corresponding predecessor forms:

New Form Number	Name	Old Form Number
EIA-800	Weekly Refinery Report	EIA-161
EIA-801	Weekly Bulk Terminal Report	EIA-162
EIA-802	Weekly Product Pipeline Report	EIA-163
EIA-803	Weekly Crude Oil Stocks Report	EIA-164
EIA-804	Weekly Imports Report	EIA-165
EIA-805	Weekly Shipments from Puerto Rico to the United States Report	—
EIA-810	Monthly Refinery Report	EIA-87
EIA-811	Monthly Bulk Terminal Report	EIA-88
EIA-812	Monthly Product Pipeline Report	EIA-89
EIA-813	Monthly Crude Oil Report	EIA-90
ERA-60	Monthly Imports Report	ERA-60
EIA-815	Monthly Shipments from Puerto Rico to the United States Report	FEA-P133-M-0
EIA-816	Monthly Natural Gas Liquids Report	EIA-84
EIA-817	Monthly Tanker and Barge Movement Report	EIA-170

Forms EIA-800 through 805 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect basic refinery operations and product stock data for major products on a weekly basis. Data from the WPSRS are published in the *Weekly Petroleum Status Report (WPSR)* and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly*

(PSM). A description of the WPSRS survey forms follows in Note 1.1.

Forms EIA-810-813, 815-817 and ERA-60 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery operations data, refinery, bulk terminal and pipeline stocks data, crude oil and petroleum product imports data and movements of petroleum products and crude oil between PAD Districts data. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Note 1.2.

Data are also obtained in magnetic tape form from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Note 1.3.

### Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

#### Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 in response to the Iranian oil crisis. Initially, the published data were taken from the American Petroleum Institute (API) *Weekly Statistical Bulletin*. However, in January 1980 the EIA began to publish weekly statistics from its own surveys, with the exception of imports statistics which the EIA did not begin collecting until June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. On Form EIA-805, a company shipping unfinished oils and finished petroleum products into the United States from Puerto Rico reports each shipment. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report*.

#### Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

**EIA-800:** Based on the EIA-810 universe, which includes all petroleum refineries in the United States and



its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and plants that produce finished motor gasoline through mechanical blending. The selected sample size is 215.

**EIA-801:** Based on the EIA-811 universe, which includes all bulk terminal facilities in the United States and its territories that have either a total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The selected sample size is 93.

**EIA-802:** Based on the EIA-812 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies that transport products covered in the weekly survey are included. The selected sample size is 65.

**EIA-803:** Based on the EIA-813 universe, which consists of all companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

**EIA-804:** Based on the EIA-814 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico. The selected sample size is 65.

**EIA-805:** Based on the EIA-815 universe, which includes all shippers of unfinished oils and petroleum products into the United States from Puerto Rico. Four companies report.

### Sampling Method

The cut-off method is the sampling procedure used for all weekly surveys except the EIA-802, which uses the monthly universe in its entirety. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous 12-month period. Companies are chosen for the sampling, beginning with the largest and adding companies until the total sample covers 90 percent of the total for the previous time period for each product published in the *Weekly Petroleum Status Report*.

### Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period closes each Friday at 7 a.m. All canvassed firms and terminal operations companies must file by 5 p.m. on the following Monday.

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## Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month ( $M_t$ ) is divided by the amount reported by the sample of companies for the most recent month ( $M_s$ ). The result is multiplied by the amount reported by the sample of companies for the current week ( $W_s$ ). The answer,  $W_t$ , is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s} (W_s)$$

This procedure is used to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratio multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

### Response Rates

The response rate for the published estimates is usually between 95 and 98 percent.

## Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

### Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems

were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movements of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

### Respondent Frame

**EIA-810:** All petroleum refineries and plants that produce finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, the Hawaiian Foreign Trade Zone, and Guam. Approximately 313 respondents report on the EIA-810.

**EIA-811:** All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have a total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline, regardless of ownership of the material. Approximately 328 respondents report on the EIA-811.

**EIA-812:** All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 94 respondents report on the EIA-812.

**EIA-813:** All companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

**EIA-815:** All licensed Importers and Importers of record shipping petroleum products from Puerto Rico into the 50 States and the District of Columbia.

Import data from the ERA-60 and EIA-815 are integrated into the import statistics reported in the PSM.

**EIA-816:** All operators of facilities designed to extract liquid hydrocarbons from natural gas stream (natural gas processing plants) or to separate a hydrocarbon stream into its component products, i.e., propane, butane, natural gasoline, etc. (fractionators). Approximately 990 respondents report on the EIA-816.

**EIA-817:** All known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are about 50 respondents.

**ERA-60:** All licensed Importers and Importers of record importing crude oil and petroleum products into the

United States and Puerto Rico. The respondent universe consisted of approximately 1,100 firms as of July 31, 1982. However, only a selected 250 Importers must report each month regardless of import activity. All others must report only for a month in which they actually had imports. The respondent universe for this survey is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *LP Gas Almanac* for information on facilities or companies going into operation or closing down. These are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Periodically an extensive survey study is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

### Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th day following the end of the report month, with the exception of the EIA-815 and ERA-60 which are due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

### Imputing Missing Data

Imputation is performed only for nonresponding companies that submitted reports the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by submission of actual data. Data for nonrespondents on the EIA-815 and 817, and ERA-60 are not imputed.

### Response Rates

As of the filing deadline, the response rates of the EIA-810 through EIA-813 respondents is over 90 per-

cent. The response rate for the EIA-816 is over 85 percent and for the EIA-817 it is 98 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Names of companies that fail to file for 2 consecutive months are forwarded for further noncompliance action.

In July 1982, the ERA-60 survey had a response rate of 98 percent by the filing deadline. The universe was 1,100 firms at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard follow-up of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. In addition, response is cross-checked with response on the Petroleum Licensing Decrementation System (PLDS), a listing of each month's importers. The response rate is generally 98 to 99 percent by the time the data are first published.

### **Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data**

#### **Background**

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data provide the only source of export statistics and are used to augment the import data collected by the EIA. Export statistics and import data from the Census tapes on liquefied petroleum gases, bonded ships bunkers and military offshore use are published in the PSM.

#### **Import Statistics (IM-145)**

##### **Coverage**

The import statistics reflect both government and non-government imports of merchandise from foreign countries into the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.
2. Shipments from anywhere to U.S. possessions and shipments from U.S. possessions to the United States. (U.S. possessions include Puerto Rico, the Virgin Islands, Guam, and American Samoa.)
3. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

#### **Source of Import Information**

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

Imported petroleum is reported as *Imports for Consumption*. Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

#### **Country and Area of Origin**

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

#### **Export Statistics (EM-522 and EM-594)**

##### **Coverage**

The export statistics reflect both government and non-government exports of domestic and foreign merchandise from the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. All shipments from U.S. possessions, regardless of whether the shipments are sent to the United States, to other U.S. possessions, or to foreign countries.
2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.
3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

#### **Source of Export Information**

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Exporters are required to file Shipper's Export Declarations with Customs officials. The only exceptions are those exporters who have been authorized to submit data directly to the Bureau of Census on magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations.

## Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

## Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

**Field Production** is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report*. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.2.

**Refinery Production** of LRGs, ethane, and finished petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. It should also be noted that refineries do not export production of crude oil, natural gasoline, isopentane, unfractionated stream, plant condensate, or other hydrocarbons.

**Imports** of crude oil and petroleum products are reported monthly on Form ERA-60, *Report of Oil Imports Into the United States and Puerto Rico*, and Form EIA-815, *Shipments of Refined Products (Including Unfinished Oils) from Puerto Rico to the United States*. In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501 and 7505. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum gases

(LPG), where the Census data show a much higher level of imports than EIA data. This occurs because the ERA-60 respondent frame was built by monitoring importers of licensed products and LPGs are not licensed products. Therefore, respondents that import only LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145. Additional data taken from the IM-145 are relatively small quantities of naphtha- and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade and for military offshore use. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the ERA-60 reporting system.

**Stock Withdrawal (+) or Addition (-)** is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (-) would represent a buildup of stocks and a reduction in the amount of petroleum supplies distributed for domestic consumption. For a description of survey forms used to make stock withdrawal or addition calculations see Explanatory Note 5.

**Unaccounted-for Crude Oil** is a balancing item that represents the difference between crude oil supply and disposition.

Crude oil supply is the sum of field production, imports and stock withdrawals or additions. Crude oil disposition is the sum of exports, refinery input, losses and product supplied. Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

## Note 3: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the State conservation agencies, which collect crude oil production values for tax purposes. The U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of ten State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports

from the State conservation agencies and the U.S. Geological Survey. The ten States that do not report monthly values are Indiana, Kentucky, Missouri, Arkansas, Utah, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly COPS information becomes available. Table 11 of this publication provides information on crude oil production for the most recent month for which COPS values are available. In order to present more timely crude oil production values, the EIA's Dallas Field Office prepares a series of State level estimates which are based on historical production patterns and are summed to obtain the monthly crude oil production values shown in the summary statistics of this publication.

The Individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. In some cases, adjustments are made to these estimates based on additional information on expected changes in production rates supplied by a State agency, a trade association, or an individual field operator.

#### Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

**Crude Oil Losses** is the sum of crude oil losses at refineries. Crude oil losses at refineries are reported on Form EIA-810, *Refinery Report*.

**Refinery Inputs** of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

**Exports** of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-810, by refineries located in these places.

**Product supplied** for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus re-

finery input, minus exports. This formula ensures that total disposition equals total supply.

**Products supplied** indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) data were misreported or reported late, (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete.

**Product supplied for crude oil** is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on EIA-813, *Monthly Crude Oil Report*. Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

#### Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form EIA-800, *Weekly Refinery Report*, and on Form EIA-803, *Weekly Crude Oil Stocks Report*. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report*. Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-800, *Weekly Refinery Report*, Form EIA-801, *Weekly Bulk Terminal Report*, and Form EIA-802, *Weekly Crude Oil Stocks Report*. For survey descriptions and other details, see Explanatory Notes 1.1 - 1.3.

#### Note 6: Average Stock Levels

The graphs displaying monthly stock levels of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquefied petroleum gases, and other products provide the user with recent data as well as a summary of data from January through December or from July through June for the most recent 3-year period. This summary takes the form of an *average range* that includes seasonal variation determined from a longer time period. The

average range represents the historical pattern; it is not a forecast.

These curves are updated semiannually (on April 1 and October 1), by basing the *average ranges* on a more recent time period. Each 3-year data series is adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive. The series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels. The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors are very small relative to crude oil stock levels. Therefore, the seasonal factors for distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products are derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors are based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973, 1974 and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized-average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the *average range* is twice this standard error.

The upper curve of the *average range* is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

## Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Forms EIA-817 and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other detail, see Explanatory Note 1.2.

## Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the *Summary Statistics* section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

## Note 9: Notes on Tables

**Note 9.1 Crude Oil and Petroleum Products Overview** statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.

- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

- Total Crude Oil and Petroleum Products Ending Stocks appear in thousands of barrels in Table 2.

**Note 9.2 Crude Oil Supply and Disposition** statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unaccounted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

- Crude losses and Product Supplied appear as labeled in Table 4.

- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousands of barrels in Table 1.

- Total Crude Oil Ending Stocks appear in thousands of barrels in Table 2.

- Total Imports appear in Table 4.

**Note 9.3 Finished Motor Gasoline Supply and Disposition** statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

- Ending Stocks appear in thousands of barrels in Table 2.

**Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition** statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Exports, and Product Supplied appear as labeled in Table 4.

- Ending Stocks appear in thousands of barrels in Table 2.

**Note 9.5 Liquefied Petroleum Gases Supply and Disposition** statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.

- Imports, Stocks Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousands of barrels in Table 2.

**Note 9.6 Other Petroleum Products Supply and Disposition** statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

- Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.

- Imports, Stock Withdrawal (+) or Addition (-), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

- Ending stocks are aggregated from ending stocks in thousands of barrels in Table 2.

**Note 9.7 Table 1. U.S. Petroleum Balance**

- Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska, Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

- Line (5): *SPR Imports* are reported on Survey Form ERA-60.

- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (-) plus unaccounted for crude oil minus crude losses in Table 2.

- Line (14): *Natural gas plant liquids (NGPL) Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

- Line (15): *NGPL Imports* equals the sum of the im-

ports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.

- Line (16): *NGPL Stock Withdrawal (+) or Addition (-)* is equal to the sum of stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.

- Line (17) equals the sum of lines (14), (15), and (16).

- Line (18): Unfinished oils and gasoline blending components *Stock Withdrawal (+) or Addition (-)* equals stock withdrawal (+) or addition (-) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.

- Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

- Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

- Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

- Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

- Line (25): *Gross Imports of Refined Products* equals imports of LPG plus imports of finished petroleum products in Table 2.

- Line (26): *Exports of Refined Products* equals exports of LPG plus exports of finished petroleum products in Table 2.

- Line (27): *Net Imports of Refined Products* equals the difference between lines (25) and (26).

- Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (-) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.

- Line (29): *Refined Products Stocks Withdrawal (+) or Addition (-)* equals the sum of stock withdrawal (+) or addition (-) for LPG and finished petroleum products in Table 2.

- Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.

- Lines (31) through (35) equal the respective products supplied in Table 2.

- Line (36): *Other Products Supplied* equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock use, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components and miscellaneous products supplied in Table 2.

- Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.

- The sum of lines (38) and (39), stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve*, equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-813.

- Line (43): stocks of *Refined Products*, equals the sum of LPG and finished petroleum product stocks in Table 2.





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